

General Rate Filing

November 29, 2002



One Service Road
Providence, Rhode Island 02905
401-461-8848 • TDD 401-461-6549 • FAX 401-461-6540

Vincent Mesolella, Jr.
Chairman

Paul Pinault
Executive Director

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PUC General Rate Filing Checklist

Location/Title

Certificate of Service

TAB 1

Notice of Change

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Existing Tariffs

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Proposed Tariffs

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Attestations

TAB 6

Supporting Testimony

Ray Marshall

TAB 7

Walter Edge

TAB 8

Cost of service schedules for the test year

WEE-1

Cost of service schedules for the rate year

WEE-4

Supporting calculations and data for known and measurable changes allowed per Rule 2.10(b)

WEE-5 thru WEE-34

A comparative statement of revenues and expenditures for the past three (4) fiscal years.

WEE-3

Workpapers detailing the test year revenues by source, tariff, rate class, etc. The sales volumes/quantities and customer counts by rate class shall be presented.

WEE-2

A schedule presenting the principal and interest amounts on debt service (long-term and short-term debt) projected for the rate year.

WEE-25 thru WEE-32

A summary of expenses incurred and projected to be incurred related to the instant rate case filing, and a schedule showing unamortized amounts from prior rate filings. This schedule shall reconcile the total amount of expense allowed in the last order, the recovery (or amortization) of expense through the test year, and the projected balance of any unrecovered (unamortized) amount at the beginning of the rate year.

WEE Testimony pages 21+22

Rate payer impact

WEE-34

Revenue proof

WEE-33

Joseph Pratt

TAB 9

Thomas Brueckner

TAB 10

Maureen E. Gurghigian

TAB 11

Karen Grande

TAB 12

Anthony Simeone (RICWFA)

TAB 13

Juan Mariscal

TAB 14

General Rate Filing Requirements

Schedule of lease payments for all property and equipment for the test and rate years

TAB 15**Lease Schedule**

A schedule presenting the principal and interest amounts paid on debt service (long-term and short-term debt) for the test year.

**Principal and Interest Paid
during test year**

Provide a description of each issue to include: source of funding, amount of original issue, date, interest rate, repayment terms, security pledged on borrowing, and other pertinent information.

Long-Term Debt

Number of employees at beginning and end of test year and the dollar amount of overtime paid during the test year and the previous two years

Employee/Overtime Analysis

A summary on the status of compliance and reporting required by prior Commission orders.

Docket 3162 Compliance

An accounting summary of restricted accounts to provide the funding, interest accrual, and expenditures of each restricted account since the date of the last rate order.

**Docket 3162 Compliance on
Restricted Accounts**

Balance Sheet for the Test Year

**See Statement of Net Assets
and Statement of Revenues,
Expenses and Changes in Net
Assets**

Annual Report for previous two years

**Previously filed with PUC,
additional copies available
upon request**

CERTIFICATE OF SERVICE

I, Karen L. Giebink, hereby certify that I have, this 29th day of November, 2002 caused a copy of the within General Rate Case Filing of the Narragansett Bay Commission to be served on the Administrator of the Division of Public Utilities and Carriers and the Office of the Attorney General.

A handwritten signature in black ink, appearing to read 'Karen L. Giebink', is written over a horizontal line.

Karen L. Giebink,
Director of Administration and Finance

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

PUBLIC UTILITIES COMMISSION

IN RE: NARRAGANSETT BAY COMMISSION

GENERAL RATE FILING OF DECEMBER 29, 2002

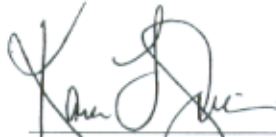
NOTICE OF CHANGE IN RATE SCHEDULES

Pursuant to R.I.G.L. SECTION 39-3-11, and in accordance with Rule 1.9 and Part Two of the Rules of Practice and Procedure of the Rhode Island Public Utilities Commission ("Commission"), the Narragansett Bay Commission ("NBC") hereby gives notice of proposed changes in rates, which we previously filed and published in compliance with R.I.G.L., Section 39-3-10.

The proposed changes are contained in the accompanying Exhibits. The new residential and non-residential rates, as proposed, are to become effective December 29, 2002. The new rates are designed to collect revenues in a 12-month period equal to \$58,277,461.

- 1) NBC is a public corporation of the State of Rhode Island, created by chapter 25 of title 46 of the Rhode Island General Laws, and having a distinct legal existence separate from the State, NBC's principal address is Narragansett Bay Commission, One Service Road, Providence, RI 02903. Pursuant to the Chapter 25 of Title 46, NBC is authorized to do business within the State of Rhode Island.
- 2) Correspondence in accordance with Rule 1.9 (a)(2) should be addressed to Karen Giebink, Director of Administration and Finance, Narragansett Bay Commission, One Service Road, Providence, RI, 02903 and Peter McGinn Legal Counsel, Tillinghast, Licht, Perkins, Smith, & Cohen LLP, 10 Weybosset Street, Providence, RI, 02908-2818.
- 3) In accordance with rule 1.9 and part Two of the Rules, the documents accompanying this filing contain data, information and testimony in support of NBC's application.

- 4) A copy of the materials herewith filed has been sent to the Administrator of the Division and the Attorney General for the State of Rhode Island.



Karen L. Giebink
Director of Administration and Finance
Narragansett Bay Commission

STATE OF RHODE ISLAND
COUNTY OF PROVIDENCE

Subscribed and sworn to before me on this the 29th day of November 2002, Pursuant the PUC Rule 1.9.



Notary Public MAUREEN A. FISETTE

MY COMMISSION EXPIRES: 7-30-05

TARIFFS OF THE NARRAGANSETT BAY COMMISSION

SCHEDULE A

NARRAGANSETT BAY COMMISSION

EFFECTIVE: Flat Fees: June 6, 2002
Consumption Fees: June 6, 2002

Applicability

Applicable throughout the entire territory served by the Field's Point and Bucklin Point Wastewater Treatment Facilities and operated by the Narragansett Bay Commission.

Sewer Use Fee Schedule

RESIDENTIAL

All residential structures up to and including six (6) dwelling units.

All residential condominiums will be billed under residential tariffs regardless of the number of dwelling units per structure/meter.

NBC Service Area

FIXED FEE:

\$68.24 per dwelling unit per year

CONSUMPTION FEE:

\$1.40/hundred cubic feet of 100% of water used

Residential Well Customers

\$204.67(based upon fixed fee and average usage of 200 gpd)

INDUSTRIAL

All structures in which water is utilized for the production and/or manufacturing based operations including non-contact cooling water.

FIXED FEES

METER SIZE

FIXED FEE

5/8"	\$ 152.27
3/4"	\$ 228.41
1"	\$ 380.68
1 1/2"	\$ 761.34
2"	\$ 1,218.15
3"	\$ 2,284.03
4"	\$ 3,806.71
6"	\$ 7,613.42
8"	\$ 12,181.48
10"	\$ 17,510.88

CONSUMPTION FEE:

NBC Service Area:

\$1.31/hundred cubic feet of 100% of water used.

COMMERCIAL

All other structures. This includes mixed use structures (i.e., combined residential/non-residential) and half-way houses and/or boarding type facilities where unrelated persons rent rooms.

FIXED FEES**METER SIZE****FIXED FEE**

5/8"	\$ 152.27
3/4"	\$ 228.41
1"	\$ 380.68
1 1/2"	\$ 761.34
2"	\$ 1,218.15
3"	\$ 2,284.03
4"	\$ 3,806.71
6"	\$ 7,613.42
8"	\$ 12,181.48
10"	\$ 17,510.88

NBC Service Area:

\$2.03/hundred cubic feet of 100% of water used.

BILLING

Residential - Fixed fee bills rendered to property owners quarterly. Consumption bills rendered to property owners as usage data is supplied by the appropriate Water Supply Board.

Condominiums (residential) - Fixed fee to be rendered to property owners and/or associations, quarterly. Consumption bills rendered to property owners and/or associations as usage data is supplied by the appropriate Water Supply Board.

Industrial - Fixed fee to be rendered to property owners quarterly. Consumption bills rendered to property owners as usage data is supplied by the appropriate Water Supply Board.

Commercial - Fixed fee to be rendered to property owners quarterly. Consumption bills rendered to property owners monthly, quarterly and/or semi-annually as usage data is supplied by the appropriate Water Supply Board.

Industrial Surcharge - If any, to be billed with consumption.

PAYMENT

All bills are due and payable upon receipt. A late charge penalty of twelve per cent (12%) per annum will be levied after thirty (30) days from the billing date.

TARIFFS OF THE NARRAGANSETT BAY COMMISSION

SCHEDULE B

NARRAGANSETT BAY COMMISSION

EFFECTIVE: Pretreatment Annual Permit Fee: June 6, 2002
 New Sewer Connection Fee: June 6, 2002
 BOD/TSS Surcharge: June 6, 2002
 All other Miscellaneous Fees: July 29, 2000

Miscellaneous Charges

1. Pretreatment Annual Permit Fee: Applicable to all users regulated under R.I.G.L. 46-25-25 and the NBC's Rules and Regulations.

CAT #	User Classification	Permit Fee
11	Electroplater/Metalfinisher	
	Flow > 2,500 GPD	\$1,560.00
	Flow ≥ 2,500 < 10,000 GPD	\$3,120.00
	Flow ≥ 10,000 GPD < 50,000	\$6,240.00
	Flow ≥ 50,000 GPD < 100,000 GPD	\$8,736.00
	Flow ≥ 100,000	\$9,360.00
12	Metal Molding and Casting	\$936.00
13	Organic Chemical Manufacturers	\$6,240.00
14	Other Categorical Industries	\$936.00
15	Metal Formers	\$4,992.00
21	Tubbing/Vibratory/Mass Finishing	
	Flow < 5,000 GPD	\$624.00
	Flow ≥ 5,000 GPD	\$1,248.00
22	Chemical Transporters, Refiners, Recyclers, Manufacturers	\$2,496.00
23	Textile Processing Firms	
	Flow < 2,500 GPD	\$1,248.00
	Flow ≥ 2,500 < 10,000 GPD	\$3,245.00
	Flow ≥ 10,000 < 50,000	\$4,368.00
	Flow ≥ 50,000 GPD	\$6,240.00

CAT #	User Classification	Permit Fee
24	Printers	
	Gravure	\$3,120.00
	Other Flow \geq 2,500 GPD	\$936.00
	Other Flow < 2,500 GPD	\$624.00
25	Industrial Laundries	\$3,120.00
26	Machine Shops/Machinery Rebuilders	\$1,248.00
27	Other firms discharging toxics and/or prohibited pollutants	
	Flow \geq 10,000 GPD	\$2,496.00
	Flow \geq 2,500 GPD < 10,000 GPD	\$1,248.00
	Flow < 2,500 GPD	\$624.00
28	Central Treatment Facilities - Hazardous Waste	\$12,480.00
29	Central Treatment Facilities - Non-Hazardous Waste	\$3,744.00
34	Manufacturers with high BOD/TSS wastestreams	
	Flow \geq 100,000 GPD	\$4,992.00
	50,000 GPD \leq Flow < 100,000 GPD	\$3,120.00
	10,000 GPD \leq Flow < 50,000 GPD	\$1,560.00
	Flow < 10,000 GPD	\$936.00
35	Other facilities discharging conventional pollutants	
	Flow \geq 10,000 GPD	\$1,248.00
	Flow < 10,000 GPD	\$624.00
37	Automotive Maintenance/Service Facilities	
	Small \leq 2 Bays	\$375.00
	Large \geq 3 Bays	\$1,248.00
40	Groundwater Remediation/Excavation Projects	
	Flow \geq 10,000 GPD	\$1,248.00
	Flow < 10,000 GPD	\$624.00
41	Recycle or Disconnected Electroplating or Chemical Processes	\$624.00

CAT #	User Classification	Permit Fee
42	Other Process Operations Disconnected or Recycled	\$250.00
43	Recycle or Disconnected Electroplating or Chemical Processes with Cooling Water or Boiler Discharges	\$749.00
44	Other Recycled or Disconnected Process Operations with Cooling Water or Boiler Discharges	\$312.00
46	Cooling Water with Solvent, Toxic and/or Hazardous Chemicals on Site	\$312.00
49	Other Discharges with Solvents, Toxics and/or Hazardous Chemicals on Site	
	Flow \geq 10,000 GPD	\$936.00
	Flow < 10,000 GPD	\$624.00
51	Cooling Water with No Solvents, Toxic or Hazardous Chemicals on Site	\$312.00
52	Boiler Blowdown/Condensate Discharges	\$312.00
53	Cooling Tower Discharges	\$312.00
59	Other Non-Toxic Industrial Discharges	
	Flow \geq 5,000 GPD	\$624.00
	Flow < 5,000 GPD	\$312.00
80	Septage Haulers/Dischargers	\$375.00
81	Food/Fish/Meat/Produce Processing (wholesale)	
	Flow < 1,000 GPD	\$312.00
	1,000 GPD \leq Flow < 10,000 GPD	\$624.00
	Flow \geq 10,000 GPD	\$1,248.00
82	Supermarkets (Retail Food Processing)	\$624.00
83	Parking Garages/Lots	\$624.00

CAT #	User Classification	Permit Fee
84	Cooling Water/Groundwater/ Boiler Discharges with Potential to Discharge Conventional Pollutants	\$312.00
85	Restaurants	
	< 50 seats	\$188.00
	≥ 50 seats < 100 seats	\$375.00
	>100 seats of fast food (2 or more fryolators and/or drive through window)	\$500.00
86	Commercial Buildings with Cafeteria and/or laundry operations	\$624.00
89	Other Commercial Facilities with Potential to Discharge Conventional Pollutants	
	< 2,500 GPD	\$312.00
	≥ 2,500 GPD	\$624.00
90	Hospitals	\$3,120.00
91	Cooling Water/Groundwater/ Boiler Discharges with Potential to Discharge Toxic, Prohibited and/or Conventional Pollutants	\$312.00
92	Laundries/Dry Cleaners	
	Laundromats	\$624.00
	Dry Cleaners with 1 washer or less	\$312.00
	Dry Cleaners with ≥ 2 washers	\$624.00
93	Photo Processing	
	< 1,000 GPD	\$312.00
	1,000 GPD ≤ Flow < 2,500	\$624.00
	2,500 GPD - 5,000 GPD	\$936.00
	> 5,000 GPD	\$1,248.00
94	X-Ray Processing	
	≤ 2 processors	\$312.00
	3 - 4 processors	\$624.00
	5 - 9 processors	\$936.00
	≥ 10 processors	\$1,248.00

CAT #	User Classification	Permit Fee
95	Clinical, Medical and Analytical Laboratories	\$624.00
96	Funeral Homes/Enbalming Operations	\$312.00
97	Motor Vehicle Service/Washing Operations	
	rate per tunnel	\$624.00
	rate per bay	\$188.00
	maximum rate per facility	\$1,248.00
99	Other Commercial Users with Potential to Discharge Toxic, Prohibited and/or Conventional Pollutants	
	Flow < 2,500 GPD	\$312.00
	Flow ≥ 2,500 GPD	\$624.00

NOTE: All flow rates are based upon operating days.

2. **New Sewer Connection Fee:** Applicable to all applications for a new service connection directly or indirectly to NBC facilities. Payable at the time of application.

Residential	\$188 per connection
Commercial	\$562 per connection
Industrial	\$562 per connection

3. **Sewer Back-up Removal Fee:** Applicable to all visits by Commission personnel to clear a sewer blockage when such blockage is determined to be a private sewer and is cleared by Commission personnel.

Charge: \$75.00 per incident

4. **Septic Tank Waste Discharge Fee:** Applicable to all discharges of septic tank waste into the NBC system.

Charge: \$44.00 per thousand gallons

5. **BOD/TSS Surcharge:** \$75.00/1,000 pounds of BOD with a concentration above 300 mg/l \$75.00/1,000 pounds of TSS with a concentration above 300 mg/l
(if applicable)

To be assessed as the result of compliance with an industrial permit or NBC requirement.

6. **Abatement Application Fee:** Applicable to all applicants who request an abatement to sewer user fees charged. Payable at the time of application.

Charge: \$36.00

TARIFFS OF THE NARRAGANSETT BAY COMMISSION

SCHEDULE A

NARRAGANSETT BAY COMMISSION

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Consumption Fees: ~~June 6, 2002~~ December 29, 2002

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Applicable throughout the entire territory served by the Field's Point and Bucklin Point Wastewater Treatment Facilities and operated by the Narragansett Bay Commission.

Sewer Use Fee Schedule

RESIDENTIAL

All residential structures up to and including six (6) dwelling units.

All residential condominiums will be billed under residential tariffs regardless of the number of dwelling units per structure/meter.

NBC Service Area

FIXED FEE:

~~\$68.24~~ \$89.80 per dwelling unit per year

CONSUMPTION FEE:

~~\$1.40~~ \$1.84/hundred cubic feet of 100% of water used

Residential Well Customers

~~\$204.67~~ \$269.38 (based upon fixed fee and average usage of 200 gpd)

INDUSTRIAL

All structures in which water is utilized for the production and/or manufacturing based operations including non-contact cooling water.

FIXED FEES

METER SIZE

FIXED FEE

5/8"	\$152.27 <u>\$200.38</u>
3/4"	\$228.41 <u>\$300.58</u>
1"	\$380.68 <u>\$500.97</u>
1 1/2"	\$761.34 <u>\$1,001.92</u>
2"	\$1,218.15 <u>\$1,603.08</u>
3"	\$2,284.03 <u>\$3,005.78</u>
4"	\$3,806.71 <u>\$5,009.63</u>
6"	\$7,613.42 <u>\$10,019.26</u>
8"	\$12,181.48 <u>\$16,030.82</u>
10"	\$17,510.88 <u>\$23,044.31</u>

CONSUMPTION FEE:

NBC Service Area:

~~\$1.31~~ \$1.72/hundred cubic feet of 100% of water used.

COMMERCIAL

All other structures. This includes mixed use structures (i.e., combined residential/non-residential) and half-way houses and/or boarding type facilities where unrelated persons rent rooms.

FIXED FEES

METER SIZE

FIXED FEE

5/8"	\$ 152.27 <u>\$200.38</u>
3/4"	\$ 228.41 <u>\$300.58</u>
1"	\$ 380.68 <u>\$500.97</u>
1 1/2"	\$ 761.34 <u>\$1,001.92</u>
2"	\$ 1,218.15 <u>\$1,603.08</u>
3"	\$ 2,284.03 <u>\$3,005.78</u>
4"	\$ 3,806.71 <u>\$5,009.63</u>
6"	\$ 7,613.42 <u>\$10,019.26</u>
8"	\$ 12,181.48 <u>\$16,030.82</u>
10"	\$ 17,510.88 <u>\$23,044.31</u>

NBC Service Area:

~~\$2.03~~\$2.67/hundred cubic feet of 100% of water used.

BILLING

Residential - Fixed fee bills rendered to property owners quarterly. Consumption bills rendered to property owners as usage data is supplied by the appropriate Water Supply Board.

Condominiums (residential) - Fixed fee to be rendered to property owners and/or associations, quarterly. Consumption bills rendered to property owners and/or associations as usage data is supplied by the appropriate Water Supply Board.

Industrial - Fixed fee to be rendered to property owners quarterly. Consumption bills rendered to property owners as usage data is supplied by the appropriate Water Supply Board.

Commercial - Fixed fee to be rendered to property owners quarterly. Consumption bills rendered to property owners monthly, quarterly and/or semi-annually as usage data is supplied by the appropriate Water Supply Board.

Industrial Surcharge - If any, to be billed with consumption.

PAYMENT

All bills are due and payable upon receipt. A late charge penalty of twelve per cent (12%) per annum will be levied after thirty (30) days from the billing date.

TARIFFS OF THE NARRAGANSETT BAY COMMISSION

SCHEDULE B

NARRAGANSETT BAY COMMISSION

EFFECTIVE: Pretreatment Annual Permit Fee: ~~June 6, 2002~~ December 29, 2002
 New Sewer Connection Fee: ~~June 6, 2002~~ December 29, 2002
 BOD/TSS Surcharge: ~~June 6, 2002~~ December 29, 2002
 All other Miscellaneous Fees: July 29, 2000

Miscellaneous Charges

1. Pretreatment Annual Permit Fee: Applicable to all users regulated under R.I.G.L. 46-25-25 and the NBC's Rules and Regulations.

CAT #	User Classification	Permit Fee
11	Electroplater/Metalfinisher	
	Flow > 2,500 GPD	\$1,560.00 <u>\$2,052.00</u>
	Flow ≥ 2,500 < 10,000 GPD	\$3,120.00 <u>\$4,106.00</u>
	Flow ≥ 10,000 GPD < 50,000	\$6,240.00 <u>\$8,212.00</u>
	Flow ≥ 50,000 GPD < 100,000 GPD	\$8,736.00 <u>\$11,496.00</u>
	Flow ≥ 100,000	\$9,360.00 <u>\$12,318.00</u>
12	Metal Molding and Casting	\$936.00 <u>\$1,232.00</u>
13	Organic Chemical Manufacturers	\$6,240.00 <u>\$8,212.00</u>
14	Other Categorical Industries	\$936.00 <u>\$1,232.00</u>
15	Metal Formers	\$4,992.00 <u>\$6,570.00</u>
21	Tubbing/Vibratory/Mass Finishing	
	Flow < 5,000 GPD	\$624.00 <u>\$820.00</u>
	Flow ≥ 5,000 GPD	\$1,248.00 <u>\$1,642.00</u>
22	Chemical Transporters, Refiners, Recyclers, Manufacturers	\$2,496.00 <u>\$3,284.00</u>
23	Textile Processing Firms	
	Flow < 2,500 GPD	\$1,248.00 <u>\$1,642.00</u>
	Flow ≥ 2,500 < 10,000 GPD	\$3,245.00 <u>\$4,270.00</u>
	Flow ≥ 10,000 < 50,000	\$4,368.00 <u>\$5,748.00</u>
	Flow ≥ 50,000 GPD	\$6,240.00 <u>\$8,212.00</u>

CAT #	User Classification	Permit Fee	
24	Printers		
	Gravure	\$3,120.00 <u>\$4,106.00</u>	
	Other Flow ≥ 2,500 GPD	\$936.00 <u>\$1,232.00</u>	
	Other Flow < 2,500 GPD	\$624.00 <u>\$820.00</u>	
25	Industrial Laundries	\$3,120.00 <u>\$4,106.00</u>	
26	Machine Shops/Machinery Rebuilders	\$1,248.00 <u>\$1,642.00</u>	
27	Other firms discharging toxics and/or prohibited pollutants		
	Flow ≥ 10,000 GPD	\$2,496.00 <u>\$3,284.00</u>	
	Flow ≥ 2,500 GPD < 10,000 GPD	\$1,248.00 <u>\$1,642.00</u>	
	Flow < 2,500 GPD	\$624.00 <u>\$820.00</u>	
28	Central Treatment Facilities - Hazardous Waste	\$12,480.00 <u>\$16,424.00</u>	
29	Central Treatment Facilities - Non-Hazardous Waste	\$3,744.00 <u>\$4,928.00</u>	
34	Manufacturers with high BOD/TSS wastestreams		
	Flow ≥ 100,000 GPD	\$4,992.00 <u>\$6,750.00</u>	
	50,000 GPD ≤ Flow < 100,000 GPD	\$3,120.00 <u>\$4,106.00</u>	
	10,000 GPD ≤ Flow < 50,000 GPD	\$1,560.00 <u>\$2,052.00</u>	
	Flow < 10,000 GPD	\$936.00 <u>\$1,232.00</u>	
35	Other facilities discharging conventional pollutants		
	Flow ≥ 10,000 GPD	\$1,248.00 <u>\$1,642.00</u>	
	Flow < 10,000 GPD	\$624.00 <u>\$820.00</u>	
37	Automotive Maintenance/Service Facilities		
	Small ≤ 2 Bays	\$375.00 <u>\$494.00</u>	
	Large ≥ 3 Bays	\$1,248.00 <u>\$1,642.00</u>	
40	Groundwater Remediation/Excavation Projects		
	Flow ≥ 10,000 GPD	\$1,248.00 <u>\$1,642.00</u>	
	Flow < 10,000 GPD	\$624.00 <u>\$820.00</u>	
41	Recycle or Disconnected Electroplating or Chemical Processes	\$624.00 <u>\$820.00</u>	

CAT #	User Classification	Permit Fee	
42	Other Process Operations Disconnected or Recycled	\$250.00 <u>\$329.00</u>	
43	Recycle or Disconnected Electroplating or Chemical Processes with Cooling Water or Boiler Discharges	\$749.00 <u>\$986.00</u>	
44	Other Recycled or Disconnected Process Operations with Cooling Water or Boiler Discharges	\$312.00 <u>\$410.00</u>	
46	Cooling Water with Solvent, Toxic and/or Hazardous Chemicals on Site	\$312.00 <u>\$410.00</u>	
49	Other Discharges with Solvents, Toxics and/or Hazardous Chemicals on Site		
	Flow \geq 10,000 GPD	\$936.00 <u>\$1,232.00</u>	
	Flow < 10,000 GPD	\$624.00 <u>\$820.00</u>	
51	Cooling Water with No Solvents, Toxic or Hazardous Chemicals on Site	\$312.00 <u>\$410.00</u>	
52	Boiler Blowdown/Condensate Discharges	\$312.00 <u>\$410.00</u>	
53	Cooling Tower Discharges	\$312.00 <u>\$410.00</u>	
59	Other Non-Toxic Industrial Discharges		
	Flow \geq 5,000 GPD	\$624.00 <u>\$820.00</u>	
	Flow < 5,000 GPD	\$312.00 <u>\$410.00</u>	
80	Septage Haulers/Dischargers	\$375.00 <u>\$494.00</u>	
81	Food/Fish/Meat/Produce Processing (wholesale)		
	Flow < 1,000 GPD	\$312.00 <u>\$410.00</u>	
	1,000 GPD \leq Flow < 10,000 GPD	\$624.00 <u>\$820.00</u>	
	Flow \geq 10,000 GPD	\$1,248.00 <u>\$1,642.00</u>	
82	Supermarkets (Retail Food Processing)	\$624.00 <u>\$820.00</u>	
83	Parking Garages/Lots	\$624.00 <u>\$820.00</u>	

CAT #	User Classification	Permit Fee	
84	Cooling Water/Groundwater/ Boiler Discharges with Potential to Discharge Conventional Pollutants	\$312.00 <u>\$410.00</u>	
85	Restaurants		
	< 50 seats	\$188.00 <u>\$248.00</u>	
	≥ 50 seats < 100 seats	\$375.00 <u>\$494.00</u>	
	>100 seats of fast food (2 or more fryolators and/or drive through window)	\$500.00 <u>\$658.00</u>	
86	Commercial Buildings with Cafeteria and/or laundry operations	\$624.00 <u>\$820.00</u>	
89	Other Commercial Facilities with Potential to Discharge Conventional Pollutants		
	< 2,500 GPD	\$312.00 <u>\$410.00</u>	
	≥ 2,500 GPD	\$624.00 <u>\$820.00</u>	
90	Hospitals	\$3,120.00 <u>\$4,106.00</u>	
91	Cooling Water/Groundwater/ Boiler Discharges with Potential to Discharge Toxic, Prohibited and/or Conventional Pollutants	\$312.00 <u>\$410.00</u>	
92	Laundries/Dry Cleaners		
	Laundromats	\$624.00 <u>\$820.00</u>	
	Dry Cleaners with 1 washer or less	\$312.00 <u>\$410.00</u>	
	Dry Cleaners with ≥ 2 washers	\$624.00 <u>\$820.00</u>	
93	Photo Processing		
	< 1,000 GPD	\$312.00 <u>\$410.00</u>	
	1,000 GPD ≤ Flow < 2,500	\$624.00 <u>\$820.00</u>	
	2,500 GPD - 5,000 GPD	\$936.00 <u>\$1,232.00</u>	
	> 5,000 GPD	\$1,248.00 <u>\$1,642.00</u>	
94	X-Ray Processing		
	≤ 2 processors	\$312.00 <u>\$410.00</u>	
	3 - 4 processors	\$624.00 <u>\$820.00</u>	
	5 - 9 processors	\$936.00 <u>\$1,232.00</u>	
	≥ 10 processors	\$1,248.00 <u>\$1,642.00</u>	

CAT #	User Classification	Permit Fee	
95	Clinical, Medical and Analytical Laboratories	\$624.00 <u>\$820.00</u>	
96	Funeral Homes/Enbalming Operations	\$312.00 <u>\$410.00</u>	
97	Motor Vehicle Service/Washing Operations		
	rate per tunnel	\$624.00 <u>\$820.00</u>	
	rate per bay	\$188.00 <u>\$248.00</u>	
	maximum rate per facility	\$1,248.00 <u>\$1,642.00</u>	
99	Other Commercial Users with Potential to Discharge Toxic, Prohibited and/or Conventional Pollutants		
	Flow < 2,500 GPD	\$312.00 <u>\$410.00</u>	
	Flow ≥ 2,500 GPD	\$624.00 <u>\$820.00</u>	

NOTE: All flow rates are based upon operating days.

2. **New Sewer Connection Fee:** Applicable to all applications for a new service connection directly or indirectly to NBC facilities. Payable at the time of application.

Residential	\$188 <u>\$248</u> per connection	
Commercial	\$562 <u>\$740</u> per connection	
Industrial	\$562 <u>\$740</u> per connection	

3. **Sewer Back-up Removal Fee:** Applicable to all visits by Commission personnel to clear a sewer blockage when such blockage is determined to be a private sewer and is cleared by Commission personnel.

Charge: \$75.00 per incident

4. **Septic Tank Waste Discharge Fee:** Applicable to all discharges of septic tank waste into the NBC system.

Charge: ~~\$44.00~~\$58.00 per thousand gallons

5. **BOD/TSS Surcharge:** ~~\$75.00~~\$99.00/1,000 pounds of BOD with a concentration above 300 mg/l ~~\$75.00~~\$99.00/1,000 pounds of TSS with a concentration above 300 mg/l

To be assessed as the result of compliance with an industrial permit or NBC requirement.

6. **Abatement Application Fee:** Applicable to all applicants who request an abatement to sewer user fees charged. Payable at the time of application.

Charge: \$36.00

TARIFFS OF THE NARRAGANSETT BAY COMMISSION

SCHEDULE A

NARRAGANSETT BAY COMMISSION

EFFECTIVE: Flat Fees: December 29, 2002
Consumption Fees: December 29, 2002

Applicability

Applicable throughout the entire territory served by the Field's Point and Bucklin Point Wastewater Treatment Facilities and operated by the Narragansett Bay Commission.

Sewer Use Fee Schedule

RESIDENTIAL

All residential structures up to and including six (6) dwelling units.

All residential condominiums will be billed under residential tariffs regardless of the number of dwelling units per structure/meter.

NBC Service Area

FIXED FEE:

\$89.80 per dwelling unit per year

CONSUMPTION FEE:

\$1.84/hundred cubic feet of 100% of water used

Residential Well Customers

\$269.38(based upon fixed fee and average usage of 200 gpd)

INDUSTRIAL

All structures in which water is utilized for the production and/or manufacturing based operations including non-contact cooling water.

FIXED FEES

METER SIZE

FIXED FEE

5/8"	\$200.38
3/4"	\$300.58
1"	\$500.97
1 1/2"	\$1,001.92
2"	\$1,603.08
3"	\$3,005.78
4"	\$5,009.63
6"	\$10,019.26
8"	\$16,030.82
10"	\$23,044.31

CONSUMPTION FEE:

NBC Service Area:

\$1.72/hundred cubic feet of 100% of water used.

COMMERCIAL

All other structures. This includes mixed use structures (i.e., combined residential/non-residential) and half-way houses and/or boarding type facilities where unrelated persons rent rooms.

FIXED FEES**METER SIZE****FIXED FEE**

5/8"	\$200.38
3/4"	\$300.58
1"	\$500.97
1 1/2"	\$1,001.92
2"	\$1,603.08
3"	\$3,005.78
4"	\$5,009.63
6"	\$10,019.26
8"	\$16,030.82
10"	\$23,044.31

NBC Service Area:

\$2.67/hundred cubic feet of 100% of water used.

BILLING

Residential - Fixed fee bills rendered to property owners quarterly. Consumption bills rendered to property owners as usage data is supplied by the appropriate Water Supply Board.

Condominiums (residential) - Fixed fee to be rendered to property owners and/or associations, quarterly. Consumption bills rendered to property owners and/or associations as usage data is supplied by the appropriate Water Supply Board.

Industrial - Fixed fee to be rendered to property owners quarterly. Consumption bills rendered to property owners as usage data is supplied by the appropriate Water Supply Board.

Commercial - Fixed fee to be rendered to property owners quarterly. Consumption bills rendered to property owners monthly, quarterly and/or semi-annually as usage data is supplied by the appropriate Water Supply Board.

Industrial Surcharge - If any, to be billed with consumption.

PAYMENT

All bills are due and payable upon receipt. A late charge penalty of twelve per cent (12%) per annum will be levied after thirty (30) days from the billing date.

TARIFFS OF THE NARRAGANSETT BAY COMMISSION

SCHEDULE B

NARRAGANSETT BAY COMMISSION

EFFECTIVE: Pretreatment Annual Permit Fee: December 29, 2002
 New Sewer Connection Fee: December 29, 2002
 BOD/TSS Surcharge: December 29, 2002
 All other Miscellaneous Fees: July 29, 2000

Miscellaneous Charges

1. Pretreatment Annual Permit Fee: Applicable to all users regulated under R.I.G.L. 46-25-25 and the NBC's Rules and Regulations.

CAT #	User Classification	Permit Fee
11	Electroplater/Metalfinisher	
	Flow > 2,500 GPD	\$2,052.00
	Flow ≥ 2,500 < 10,000 GPD	\$4,106.00
	Flow ≥ 10,000 GPD < 50,000	\$8,212.00
	Flow ≥ 50,000 GPD < 100,000 GPD	\$11,496.00
	Flow ≥ 100,000	\$12,318.00
12	Metal Molding and Casting	\$1,232.00
13	Organic Chemical Manufacturers	\$8,212.00
14	Other Categorical Industries	\$1,232.00
15	Metal Formers	\$6,570.00
21	Tubbing/Vibratory/Mass Finishing	
	Flow < 5,000 GPD	\$820.00
	Flow ≥ 5,000 GPD	\$1,642.00
22	Chemical Transporters, Refiners, Recyclers, Manufacturers	\$3,284.00
23	Textile Processing Firms	
	Flow < 2,500 GPD	\$1,642.00
	Flow ≥ 2,500 < 10,000 GPD	\$4,270.00
	Flow ≥ 10,000 < 50,000	\$5,748.00
	Flow ≥ 50,000 GPD	\$8,212.00

CAT #	User Classification	Permit Fee
24	Printers	
	Gravure	\$4,106.00
	Other Flow \geq 2,500 GPD	\$1,232.00
	Other Flow < 2,500 GPD	\$820.00
25	Industrial Laundries	\$4,106.00
26	Machine Shops/Machinery Rebuilders	\$1,642.00
27	Other firms discharging toxics and/or prohibited pollutants	
	Flow \geq 10,000 GPD	\$3,284.00
	Flow \geq 2,500 GPD < 10,000 GPD	\$1,642.00
	Flow < 2,500 GPD	\$820.00
28	Central Treatment Facilities - Hazardous Waste	\$16,424.00
29	Central Treatment Facilities - Non-Hazardous Waste	\$4,928.00
34	Manufacturers with high BOD/TSS wastestreams	
	Flow \geq 100,000 GPD	\$6,750.00
	50,000 GPD \leq Flow < 100,000 GPD	\$4,106.00
	10,000 GPD \leq Flow < 50,000 GPD	\$2,052.00
	Flow < 10,000 GPD	\$1,232.00
35	Other facilities discharging conventional pollutants	
	Flow \geq 10,000 GPD	\$1,642.00
	Flow < 10,000 GPD	\$820.00
37	Automotive Maintenance/Service Facilities	
	Small \leq 2 Bays	\$494.00
	Large \geq 3 Bays	\$1,642.00
40	Groundwater Remediation/Excavation Projects	
	Flow \geq 10,000 GPD	\$1,642.00
	Flow < 10,000 GPD	\$820.00
41	Recycle or Disconnected Electroplating or Chemical Processes	\$820.00

CAT #	User Classification	Permit Fee
42	Other Process Operations Disconnected or Recycled	\$329.00
43	Recycle or Disconnected Electroplating or Chemical Processes with Cooling Water or Boiler Discharges	\$986.00
44	Other Recycled or Disconnected Process Operations with Cooling Water or Boiler Discharges	\$410.00
46	Cooling Water with Solvent, Toxic and/or Hazardous Chemicals on Site	\$410.00
49	Other Discharges with Solvents, Toxics and/or Hazardous Chemicals on Site	
	Flow \geq 10,000 GPD	\$1,232.00
	Flow < 10,000 GPD	\$820.00
51	Cooling Water with No Solvents, Toxic or Hazardous Chemicals on Site	\$410.00
52	Boiler Blowdown/Condensate Discharges	\$410.00
53	Cooling Tower Discharges	\$410.00
59	Other Non-Toxic Industrial Discharges	
	Flow \geq 5,000 GPD	\$820.00
	Flow < 5,000 GPD	\$410.00
80	Septage Haulers/Dischargers	\$494.00
81	Food/Fish/Meat/Produce Processing (wholesale)	
	Flow < 1,000 GPD	\$410.00
	1,000 GPD \leq Flow < 10,000 GPD	\$820.00
	Flow \geq 10,000 GPD	\$1,642.00
82	Supermarkets (Retail Food Processing)	\$820.00
83	Parking Garages/Lots	\$820.00

CAT #	User Classification	Permit Fee
84	Cooling Water/Groundwater/ Boiler Discharges with Potential to Discharge Conventional Pollutants	\$410.00
85	Restaurants	
	< 50 seats	\$248.00
	≥ 50 seats < 100 seats	\$494.00
	>100 seats of fast food (2 or more fryolators and/or drive through window)	\$658.00
86	Commercial Buildings with Cafeteria and/or laundry operations	\$820.00
89	Other Commercial Facilities with Potential to Discharge Conventional Pollutants	
	< 2,500 GPD	\$410.00
	≥ 2,500 GPD	\$820.00
90	Hospitals	\$4,106.00
91	Cooling Water/Groundwater/ Boiler Discharges with Potential to Discharge Toxic, Prohibited and/or Conventional Pollutants	\$410.00
92	Laundries/Dry Cleaners	
	Laundromats	\$820.00
	Dry Cleaners with 1 washer or less	\$410.00
	Dry Cleaners with ≥ 2 washers	\$820.00
93	Photo Processing	
	< 1,000 GPD	\$410.00
	1,000 GPD ≤ Flow < 2,500	\$820.00
	2,500 GPD - 5,000 GPD	\$1,232.00
	> 5,000 GPD	\$1,642.00
94	X-Ray Processing	
	≤ 2 processors	\$410.00
	3 - 4 processors	\$820.00
	5 - 9 processors	\$1,232.00
	≥ 10 processors	\$1,642.00

CAT #	User Classification	Permit Fee
95	Clinical, Medical and Analytical Laboratories	\$820.00
96	Funeral Homes/Enbalming Operations	\$410.00
97	Motor Vehicle Service/Washing Operations	
	rate per tunnel	\$820.00
	rate per bay	\$248.00
	maximum rate per facility	\$1,642.00
99	Other Commercial Users with Potential to Discharge Toxic, Prohibited and/or Conventional Pollutants	
	Flow < 2,500 GPD	\$410.00
	Flow ≥ 2,500 GPD	\$820.00

NOTE: All flow rates are based upon operating days.

2. **New Sewer Connection Fee:** Applicable to all applications for a new service connection directly or indirectly to NBC facilities. Payable at the time of application.

Residential	\$248 per connection
Commercial	\$740 per connection
Industrial	\$740 per connection

3. **Sewer Back-up Removal Fee:** Applicable to all visits by Commission personnel to clear a sewer blockage when such blockage is determined to be a private sewer and is cleared by Commission personnel.

Charge: \$75.00 per incident

4. **Septic Tank Waste Discharge Fee:** Applicable to all discharges of septic tank waste into the NBC system.

Charge: \$58.00 per thousand gallons

5. **BOD/TSS Surcharge:** \$99.00/1,000 pounds of BOD with a concentration above 300 mg/l \$99.00/1,000 pounds of TSS with a concentration above 300 mg/l
(if applicable)

To be assessed as the result of compliance with an industrial permit or NBC requirement.

6. **Abatement Application Fee:** Applicable to all applicants who request an abatement to sewer user fees charged. Payable at the time of application.


Charge: \$36.00

IN RE:
NARRAGANSETT BAY COMMISSION
TARIFF FILING OF November 29, 2002

NARRAGANSETT BAY COMMISSION


ATTESTATION

I, Raymond Marshall, Deputy Director for the Narragansett Bay Commission, hereby make affidavit that the testimony I presented is true and correct to the best of my knowledge, information and belief.


Raymond Marshall

STATE OF RHODE ISLAND
PROVIDENCE, SC.

Subscribed and sworn to before me on this 27th day of November 2002.

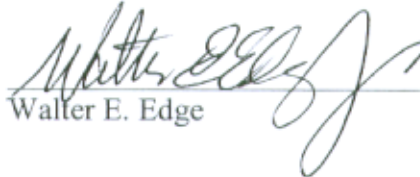

Notary Public MAUREEN A. FISSETTE
my commission Expires: 7-30-05

IN RE:
NARRAGANSETT BAY COMMISSION
TARIFF FILING OF November 29, 2002

NARRAGANSETT BAY COMMISSION


ATTESTATION

I, Walter E. Edge, Consulting Department Director of Bacon and Edge, hereby make affidavit that the testimony I presented on behalf of the Narragansett Bay Commission is true and correct to the best of my knowledge, information and belief.


Walter E. Edge

STATE OF RHODE ISLAND
PROVIDENCE, SC.

Subscribed and sworn to before me on this 27th day of November 2002.


Notary Public MAUREEN A. FISSETTE
my commission Expires: 7-30-05

IN RE:
NARRAGANSETT BAY COMMISSION
TARIFF FILING OF November 29, 2002

NARRAGANSETT BAY COMMISSION


ATTESTATION

I, Thomas Brueckner, Engineering Manager for the Narragansett Bay Commission, hereby make affidavit that the testimony I presented is true and correct to the best of my knowledge, information and belief.


Thomas Brueckner

STATE OF RHODE ISLAND
PROVIDENCE, SC.

Subscribed and sworn to before me on this 27th day of November 2002.



Notary Public MAUREEN A. FISCETTE
my commission Expires: 7-30-05

IN RE:
NARRAGANSETT BAY COMMISSION
TARIFF FILING OF November 29, 2002

NARRAGANSETT BAY COMMISSION


ATTESTATION

I, Maureen E. Gurghigian, Senior Vice President of First Southwest Company, hereby make affidavit that the testimony I presented on behalf of the Narragansett Bay Commission is true and correct to the best of my knowledge, information and belief.


Maureen E. Gurghigian

STATE OF RHODE ISLAND
PROVIDENCE, SC.

Subscribed and sworn to before me on this 27th day of November 2002.


Notary Public MAUREEN A. FISETTO
my commission Expires: 7-30-05

IN RE:
NARRAGANSETT BAY COMMISSION
TARIFF FILING OF NOVEMBER 29, 2002

STATE OF RHODE ISLAND
PUBLIC UTILITIES COMMISSION


ATTESTATION UNDER RULE 2.7

I, Leah E. Foster, Controller, of the Narragansett Bay Commission, in conformance with part 2.7, of the Rules of Practice and Procedure of the Public Utilities Commission, hereby attest that the financial data presented in the rate base, cost of service, revenue statements and supporting data submitted herein are an accurate reflection of the books of the Narragansett Bay Commission. Any differences between the books and the test year data, and any changes in the manner of recording an item on the company's books during the test year have been expressly noted.


Leah E. Foster, CPA

STATE OF RHODE ISLAND
PROVIDENCE, SC.

Subscribed and sworn to before me on this 27th day of November 2002.



Notary Public MAUREEN A. FISET
MY COMMISSION EXPIRES: 7-30-05

IN RE:
NARRAGANSETT BAY COMMISSION
TARIFF FILING OF November 29, 2002

NARRAGANSETT BAY COMMISSION

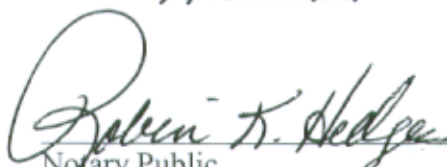
ATTESTATION

I, Anthony B. Simeone, Executive Director of the RICWFA, hereby make affidavit that the testimony I presented on behalf of the Narragansett Bay Commission is true and correct to the best of my knowledge, information and belief.


Anthony B. Simeone

STATE OF RHODE ISLAND
PROVIDENCE, SC.

Subscribed and sworn to before me on this 26th day of November 2002.

 exp. 12/16/05
Notary Public

IN RE:
NARRAGANSETT BAY COMMISSION
TARIFF FILING OF November 29, 2002

NARRAGANSETT BAY COMMISSION


ATTESTATION

I, Karen Grande, Bond Counsel for Tillinghast, Licht, Perkins, Smith & Cohen, LLP,
hereby make affidavit that the testimony I presented on behalf of the Narragansett Bay
Commission is true and correct to the best of my knowledge, information and belief.


Karen Grande

STATE OF RHODE ISLAND
PROVIDENCE, SC.

Subscribed and sworn to before me on this 26th day of November 2002.


Notary Public
My Commission Expires: 10/24/04

IN RE:
NARRAGANSETT BAY COMMISSION
TARIFF FILING OF November 29, 2002

NARRAGANSETT BAY COMMISSION


ATTESTATION

I, Joseph Pratt, Vice President of Louis Berger Group Inc, hereby make affidavit that the testimony I presented on behalf of the Narragansett Bay Commission is true and correct to the best of my knowledge, information and belief.


Joseph Pratt

STATE OF RHODE ISLAND
PROVIDENCE, SC.

Subscribed and sworn to before me on this 25th day of November 2002.


Notary Public

ELIZABETH M. WEST
NOTARY PUBLIC
MY COMMISSION EXPIRES 9/10/2005

IN RE:
NARRAGANSETT BAY COMMISSION
TARIFF FILING OF November 29, 2002

NARRAGANSETT BAY COMMISSION

ATTESTATION

I, Juan Mariscal, Director of Planning, Policy and Regulation for the Narragansett Bay Commission, hereby make affidavit that the testimony I presented is true and correct to the best of my knowledge, information and belief.

STATE OF RHODE ISLAND
PROVIDENCE, SC.



Juan Mariscal

Subscribed and sworn to before me on this 26th day of November 2002.



Notary Public

1
2 **NARRAGANSETT BAY COMMISSION**
3

4 PRE-FILED DIRECT TESTIMONY
5 OF RAYMOND J. MARSHALL, P.E.
6
7

8 **Q. Please state your name and address.**

9 A. Raymond Marshall. My business address is the Narragansett Bay Commission
10 (NBC), One Service Road, Providence, RI 02906.
11

12 **Q. For whom are you employed and what is your position?**

13 A. I am employed by the NBC as its Deputy Director.
14

15 **Q. For how long have you been so employed?**

16 A. Since June 1992. Prior to that I was an Executive Vice President with the firm of
17 Beta Engineering for ten (10) years. I served as the Wastewater Director for the
18 Town of Burrillville two (2) years earlier. I was also employed at Metcalf &
19 Eddy, an engineering consulting firm in Boston, for approximately seven (7)
20 years.
21

22 **Q. What are your educational and professional credentials?**

23 A. I received my undergraduate degree from the University of Rhode Island in Civil
24 Engineering in 1973 and I graduated from Northeastern University with a Masters
25 Degree in Sanitary Engineering in 1978. In addition, I am a Professional

1 Engineer in Rhode Island, Massachusetts, New Hampshire, Maine and Florida. I
2 am also a Certified Wastewater Treatment Plant Operator in Rhode Island.

3

4 **Q. Have you testified before the Rhode Island Public Utilities Commission**
5 **(PUC) previously?**

6 A. Yes, I have testified before the PUC on behalf of the Narragansett Bay
7 Commission (NBC) as part of Docket 3162.

8

9 **Q. To whom do you report in your position as NBC's Deputy Director?**

10 A. As Deputy Director, I report directly to the Executive Director.

11

12 **Q. What are your duties and responsibilities as Deputy Director?**

13 A. I assist with the daily operations of the agency and assume the duties and
14 responsibilities of the Executive Director if he is unavailable. In addition, the
15 three Division Directors report directly to the Executive Director through me.
16 Those three Divisions are the Division of Operations & Engineering, the Division
17 of Policy, Planning and Regulation and the Division of Administration & Finance.
18 In addition, the Executive Division, which includes Human Resources,
19 Construction, Legal Counsel, Public Affairs and Governmental Relations, all
20 report directly to me.

21

22

1 **Q. What is the purpose of your testimony?**

2 A. To highlight some of the salient events and discuss some of the policy decisions
3 that have occurred since the NBC's last general rate case.

4

5 **Q. When was the NBC's last general rate case?**

6 A. The NBC's last general rate case (Docket 3162) was filed with the PUC on June
7 29, 2000 and resulted in rates effective January 29, 2001. The NBC made an
8 abbreviated filing with the PUC for debt service on December 21, 2001 with new
9 rates resulting on June 6, 2002.

10

11 **Q. Can you explain the need and objectives of this filing?**

12 A. This filing is primarily driven by an increase in debt service required to fund
13 NBC's approved Capital Improvement Program (CIP), which represents
14 approximately 88% of the proposed rate increase. In addition, 12% of the rate
15 increase is for increased operations and maintenance costs. Each of these items is
16 addressed more directly, in detail, in the testimony of others.

17

18 **Q. How was this filing developed?**

19 A. The NBC has been working with its financial advisor, bond counsel and rate
20 consultant, to develop revenue requirements, a long-term debt model and capital
21 financing alternatives, along with rates. Presentations on the financing options

1 and the components of the filing were made to the NBC's Finance Committee on
2 January 28, September 25, October 15, and October 23, 2002.

3

4 **Q. Did the NBC's Board of Commissioners authorize this filing?**

5 A Yes. Based upon the recommendation of the Finance Committee, NBC's Board
6 of Commissioners unanimously approved the filing on October 23, 2002.

7

8 **Q. Can you please provide more information regarding the NBC's CIP?**

9 A. On an annual basis, the NBC prepares a CIP that identifies capital projects that
10 are to be initiated, in progress, or will be completed during a five-year window.
11 The CIP is a planning document that also serves to identify project costs,
12 schedules and funding sources. The costs reflected in the CIP are estimates that
13 may be based on; a) limited information if the project is still in the planning stage,
14 b) planning and/or design documents, or c) actual contract bid prices. This filing
15 incorporates the project cost information from the NBC's approved FY 2004-
16 2008 CIP (see Exhibit RM-1). A summary of the project costs on an annual basis
17 is also included as part Walter Edge's testimony as Schedule WEE-24. Please
18 refer to the testimony of Walter Edge and Maureen Gurghigian for the discussion
19 and analysis regarding the financing of the CIP.

20

21 The two most significant projects included in the CIP are Phase I of the Combined
22 Sewer Overflow Abatement Program (CSO) and Contract 807: Improvements to

1 the Bucklin Point Wastewater Treatment Facility. Both projects are under
2 construction and a discussion of their progress is included in the testimony of
3 Joseph Pratt and Tom Brueckner.

4

5

6 **Q. What actions has NBC taken in order to minimize the ratepayer impact of**
7 **the CIP?**

8 A. The NBC has been actively pursuing federal financial assistance. As a result of
9 the substantial efforts of the entire Congressional delegation of Rhode Island, the
10 NBC has been the recipient of \$4,150,400 in federal grants the last two fiscal
11 years. The NBC continues to actively lobby for federal assistance.

12

13 In addition, the voters of the State of Rhode Island approved a \$60 million bond
14 issue for the Rhode Island Clean Water Finance Agency (RICWFA) in November
15 2000. As part of the legislation, “not less than \$70,000,000 in leveraged funds
16 will be allocated for loans at a subsidized rate of zero percent to the Narragansett
17 Bay Commission to fund costs associated with combined sewage overflow
18 projects.” The RICWFA has implemented this program by structuring loans at a
19 “blended” rate of zero and the traditional subsidized interest rate at 2/3 of the
20 market rate. The NBC closed on its first loan at the new blended rate on October
21 24, 2002.

22

1 **Q. Is the NBC requesting an increase in the number of approved personnel**
2 **positions in this filing?**

3 A. Yes, although the NBC will continue to operate with approximately the same
4 number of positions that were approved by the PUC in Docket 2216 filed in 1995.
5 In Docket 2216 the PUC authorized 253 positions. NBC's last general rate filing,
6 Docket 3162, included funding for 241 positions. This filing includes funding for
7 254 positions. Of the thirteen additional positions, it should be noted that six (6)
8 are directly related to construction management activities and will be reimbursed
9 through capital funds. Of the remaining eight (8) positions, four (4) are related to
10 the STAR Project referenced in the testimony of Juan Mariscal. An additional
11 position is that of a Security Guard, a position needed primarily as a result of
12 September 11, 2001. The other two (2) positions support the accounting and
13 finance functions and are needed to support the capital program. This issue is
14 further addressed in the testimony of Walter Edge.

15
16 **Q. Has the NBC successfully consolidated and relocated all of its facilities?**

17 A. Yes. During calendar year 2001 all staff, other than those working at Bucklin
18 Point, were relocated to facilities located on or adjacent to the Field's Point
19 Wastewater Treatment Facility (WWTF) property. NBC completed the
20 construction of new administrative offices, and the two laboratories were
21 consolidated into a new "state of the art" laboratory adjacent to the Field's Point
22 WWTF. The Interceptor Maintenance group was also relocated to a new, secure

1 site. NBC's Pretreatment and Environmental Monitoring and Data Analysis
2 sections were relocated into refurbished office space in the Field's Point
3 Operations building.

4
5 In order to resolve a number of issues, the NBC is currently exploring the
6 possibility of acquiring additional land on the north side of the Field's Point
7 WWTF, the closure of Service Rd. and the relocation of the City's animal shelter.
8 The northern sites and animal shelter are currently owned by the City of
9 Providence and would be ideal locations for the proposed new biosolids
10 dewatering facility, or additional treatment facilities, to meet pending nutrient
11 reduction standards, since they are adjacent to NBC facilities. The NBC currently
12 owns land on Field's Point Drive and this site could potentially be exchanged for
13 the northern site property and used as the new location of the animal shelter.
14 Additional discussion of the status of the biosolids contract is provided later in my
15 testimony.

16
17 **Q. Can you highlight some of the NBC's recent accomplishments?**

18 A. Yes. A number of significant events have occurred. As mentioned, the NBC
19 began the construction of the CSO Abatement Project Phase I Facilities and broke
20 ground on Contract 807: Improvements to the Bucklin Point Wastewater
21 Treatment Facilities.

22

1 NBC continues in its commitment to the public and environmental leadership. In
2 September 2002, NBC began quarterly public informational forums on the CSO
3 Project, in which citizens are able to interact face-to-face with project staff,
4 receive construction and budget updates, and ask questions. In a further effort to
5 assist the public, NBC has become an active participant in the Traffic During
6 Construction Committee, which includes the Department of Transportation
7 (DOT), the City of Providence, Rhode Island Public Transit Authority (RIPTA),
8 the Jewelry District, and Rhode Island Hospital. The Providence Foundation
9 heads the Committee, and its purpose is to mitigate traffic disruption due to the
10 numerous construction projects currently underway in Providence.

11
12 Additionally, NBC recently launched the Woonasquatucket River Restoration
13 Initiative to clean up floatable pollution on the river. The effort involved
14 recruiting volunteers and resources from private businesses, other state agencies
15 (the Department of Environmental Management, the Department of
16 Transportation, etc.) and NBC staff to remove tires, shopping carts, and other
17 pollution from the river.

18
19 From a financial perspective, in anticipation of our most recent loan from the
20 RICWFA, the NBC went through the credit rating process with Standard and
21 Poor's. We were pleased to be informed that the NBC's credit rating was
22 upgraded from an "A" to an "A+".

1

2 In addition, NBC was also recently notified that we received the Excellence in
3 Budget Presentation Award from the Government Finance Officers Association, a
4 national professional organization that sets the standards for governmental finance
5 and accounting operations, policies and reporting. In order to receive the award,
6 which is the highest form of recognition in governmental budgeting, NBC had to
7 satisfy nationally recognized guidelines for effective budget presentation. This
8 included a requirement that the budget be proficient in four categories: as a policy
9 document, a financial plan, an operations guide, and as a communications device.

10

11 It is also important to note that the Executive Director of NBC was recently
12 named President of the Association of Metropolitan Sewerage Agencies (AMSA).
13 This is a influential post that has enabled Mr. Pinault to work closely with federal
14 legislative staff and leaders in an effort to secure additional funding and formulate
15 federal policy favorable to wastewater agencies such as NBC.

16

17 **Q. Can you please provide an update on the NBC's long-term biosolids handling**
18 **plans?**

19 A. Yes. NBC has been actively pursuing a long-term biosolids handling facility in
20 conjunction with the Rhode Island Resource Recovery Corporation (RIRRC).
21 Currently, NBC incinerates sludge at Field's Point and uses a private contractor
22 for sludge disposal at Bucklin Point. The new facility will provide a safe, reliable,

1 and, by eliminating the need for costly capital improvements to the solids
2 handling facilities at Field's Point, a cost-effective solution for biosolids disposal
3 at NBC. The project also has economic and environmental benefits for RIRRC,
4 since the treated biosolids will be used as landfill cover by that agency, reducing
5 the amount of landfill cover they will need to purchase, and the amount of sludge
6 placed directly in the landfill.

7
8 The project is currently in the design and permitting phase. The third party vendor
9 (Synagro) is meeting with RIRRC and the Department of Environmental
10 Management (DEM) on a regular basis to address issues such as the final location
11 of the facilities. The NBC has met with Synagro to discuss necessary contract
12 modifications and to coordinate the design issues with our operational needs. In
13 addition, the RIRRC continues to be committed to providing this valuable project
14 and service which will benefit many Rhode Island communities.

15
16 **Q. Can you please describe NBC's Asset Management Program and the related**
17 **Federal Requirements?**

18 A. NBC is in the process of building a high quality Asset Management Program.
19 This program uses advanced management techniques to manage infrastructure
20 capital assets, which is increasingly more important in the wastewater treatment
21 industry. An Asset Management Program links inventory, condition, service
22 levels, useful life and repair costs to provide management with guidance as to

1 where, how much, and when to invest in infrastructure maintenance, rehabilitation
2 and replacement.

3
4 NBC is in the process of developing an extensive infrastructure and condition
5 assessment database, using a new software application. Database infrastructure
6 items include NBC's interceptors, manholes and tidegates. This application will
7 ultimately be linked to our Geographic Information System. NBC is also
8 installing an upgrade to the work order management and inventory system related
9 to plant assets. This will ensure that the treatment plant, pumping stations, and
10 fleet assets are properly maintained and replaced.

11
12 In addition, the asset management program will aid the NBC in complying with
13 the Federal Capacity Management Operations and Maintenance (CMOM)
14 requirements. This federal requirement addresses the need to inventory, assess
15 and repair major interceptors in an effort to maximize system capacity and
16 reliability.

17
18 This program will also enable NBC to better plan for future capital requirements.
19 The United States Environmental Protection Agency recently reported that there
20 is an increasing gap between future capital needs and spending rates in the
21 wastewater industry. The Agency projects that by the year 2020 one half of all
22 capital expenditures will be required for replacement of existing infrastructure.

1 NBC's Asset Management Program will assist in identifying future needs in
2 capital resources, thereby reducing funding gaps between spending and available
3 financial resources.

4
5 NBC's Asset Management Program will also provide short and long-term benefits
6 to NBC and its ratepayers. It will ensure continued good management of our
7 infrastructure capital assets to minimize the cost of operations while delivering
8 better service to our customers.

9
10 **Q. How do NBC's rates compare to those of other wastewater utilities?**

11 A. The NBC has been able to contain operating costs over the years and as a result
12 remained competitive when compared to other wastewater utilities on both a state
13 and national level. Given the debt service associated with our CIP, however,
14 NBC's rates have increased over the last two years.

15
16 With the rate increase as filed, the average annual residential bill would be \$269
17 (based on average usage of 200 gallons of water per day). The most recent
18 statewide survey data available is from January 2001. Based upon this survey,
19 the NBC's proposed rates would place NBC sixth lowest in the State. Based
20 upon a MWRA survey (from 2000) the NBC's proposed rates would result in
21 residential sewer charges that rank sixteenth lowest among twenty-seven cities
22 nationwide.

1

2 **Q. Is the NBC in compliance with current Orders from the PUC?**

3 A. Yes. Please see Exhibit RM-2.

4

5 **Q. Have you provided the appropriate schedules for this filing as required by**
6 **the PUC's Rules of Practice and Procedure?**

7 A. Yes. Please refer to the checklist that is located after the Table of Contents for a
8 listing of the items and their location in the filing.

9

10 **Q. Does this conclude your pre-filed testimony?**

11 A. Yes.

12

Capital Improvement Program

Fiscal Years 2004 – 2008



One Service Road
Providence, Rhode Island 02905
401-461-8848 • TDD 401-461-6549 • FAX 401-461-6540

Vincent Mesolella, Jr.
Chairman

Paul Pinault
Executive Director

<p align="center">2004-2008 Capital Improvement Program</p> <p align="center">Project Listing</p>

Wastewater Treatment Facility Improvements Page

Contract 103.00D	10	Short-Term Solids Handling Improvements	\$ 810,000
Contract 109.01P	12	FPWWTF - Nitrogen Removal Facilities and Odor Control	39,300,000
Contract 109.03C	14	FPWWTF - Odor Control at Field's Point	54,000
Contract 113.01P	16	Incinerator Permitting	165,000
Contract 114.00P	18	Water Quality Background Monitoring, Including Nutrients	90,000
Contract 115.00P	20	Asset Management System	125,000
Contract 807.00C	22	BPWWTF CSO Facilities and Other Improvements	51,739,000
Total Wastewater Treatment Facility Improvements			\$ 92,283,000

Sewer System Improvements

Contract 302.03D	26	Phase I CSO Facilities - Design	\$ 110,000
Contract 302.03 RS	28	Phase I CSO Facilities - Program Management and Construction Management	22,990,000
Contract 302.06C	30	Phase I CSO Facilities - Main Spine and Ancillary Facilities	115,316,000
Contract 302.06	32	Phase I CSO Facilities - Owner Controlled Insurance Policy (OCIP)	6,901,000
Contract 302.08C	34	Phase I CSO Facilities - Overflows 004/061	2,464,000
Contract 302.09C	36	Phase I CSO Facilities - Overflow 009 and Emergency Overflow Structure	6,487,000
Contract 302.10C	38	Phase I CSO Facilities - Overflow 032	7,000,000
Contract 302.11C	40	Phase I CSO Facilities - Woonasquatucket Interceptor Relief	2,750,000
Contract 302.12C	42	Phase I CSO Facilities - Overflow 067	4,510,000
Contract 302.13C	44	Phase I CSO Facilities - Regulator Modifications	1,683,000
Contract 302.14C	46	Phase I CSO Facilities - Tunnel Pump Station Fitout and Startup	33,660,000
Contract 302.15C	48	Phase I CSO Facilities - Overflows 006/007	5,449,000
Contract 302.21.00	50	CSO Flow and Water Quality Monitoring	1,000,000
Contract 302.22P	52	Stormwater Attenuation Pilot Study	300,000
Contract 304.00.00	54	Evaluation and Cleaning of CSO Interceptors	5,000,000
Contract 304.07D	56	Concord Street Sewer Repair	300,000
Contract 304.09D	58	Burrington Street and Grotto Brook Sewer Repairs	1,100,000
Contract 304.10P	60	Sewer System Infiltration/Inflow Study	3,000,000
Contract 304.11C	62	Floatables Control Facilities	15,630,000
Contract 704.00D	64	Rehabilitation of Washington Highway and Omega Pump Stations	5,764,000
Contract 903	66	Geographic Information System Implementation	235,000
Total Sewer System Improvements			\$ 241,649,000

Total Improvements \$ 333,932,000

Narragansett Bay Commission

Service Area

The Narragansett Bay Commission is Rhode Island's largest wastewater authority dedicated to providing reliable, cost-effective wastewater collection and treatment services to over 360,000 residents and 8,000 businesses in ten Rhode Island communities in the metropolitan Providence and Blackstone Valley areas. These communities include: Providence, North Providence, Johnston, Pawtucket, Central Falls, Cumberland, Lincoln, the Northern portion of East Providence and small sections of Cranston and Smithfield.

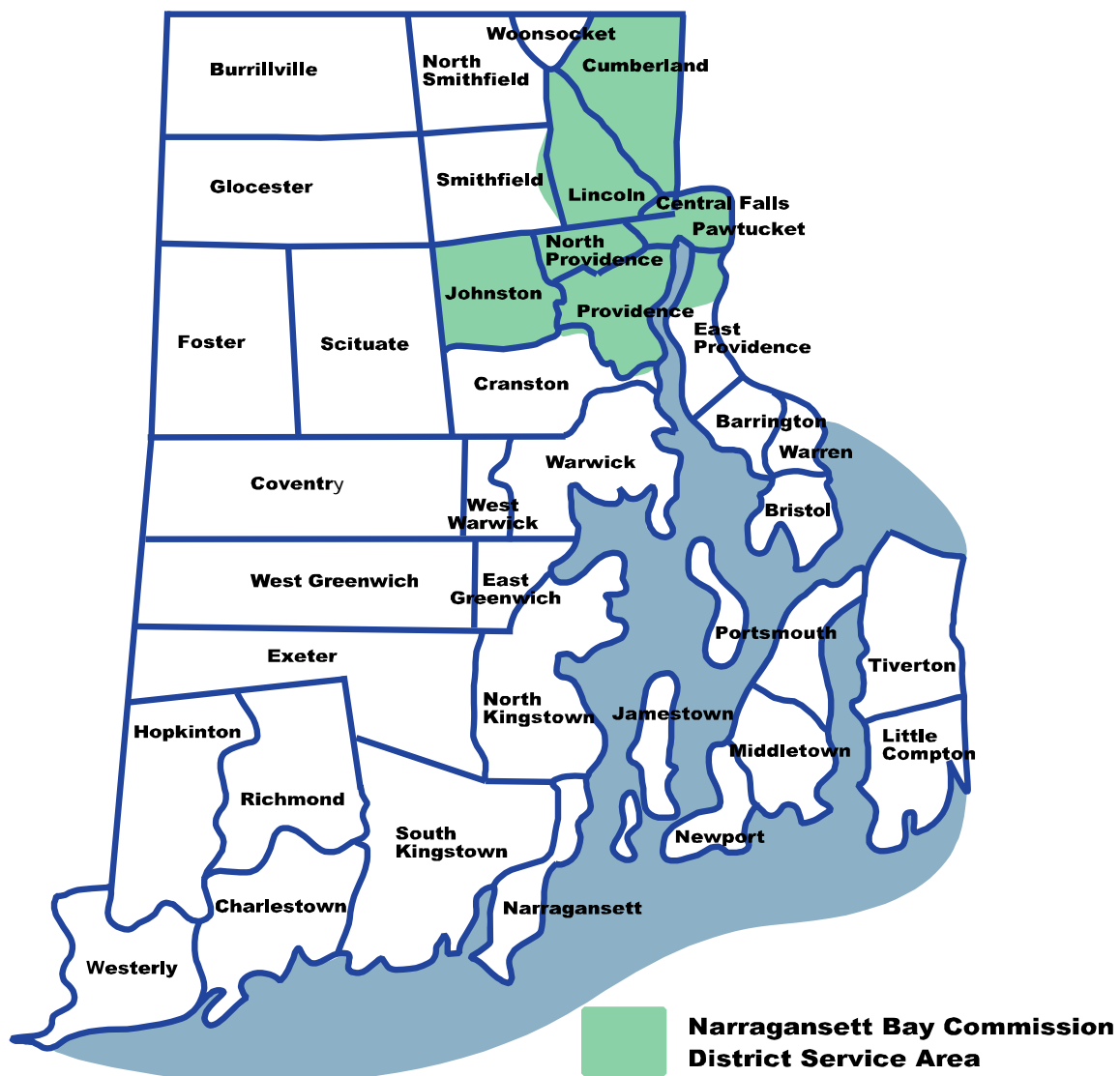


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OVERVIEW

The Narragansett Bay Commission's (NBC) Fiscal Year 2004 - 2008 Capital Improvement Program (CIP) identifies over \$333.9 million in capital improvement projects in progress, to be initiated or completed within the five fiscal years of 2004 - 2008. Also reflected are total expenditures of approximately \$471 million for the completion of all scheduled projects.

The CIP describes each capital project while providing cash flow projections, funding sources and schedules. Project costs are also depicted by phase (planning, design, and construction).

The CIP mirrors the five-year window used by the State of Rhode Island for capital planning purposes. Capital items funded through the operating budget and/or replacement reserve are not identified in the CIP, as these items are now reflected in NBC's operating budget. A contingency on the construction portion of projects is included in the CIP.

The CIP is a planning document that serves to outline projected costs, schedules and funding sources for significant projects that are necessary to meet current and anticipated regulatory requirements and/or will improve the efficiency of NBC's operations. There are many factors that influence how the NBC finances its capital program. This CIP incorporates the State of Rhode Island's capital budget, funding available under the State Revolving Loan Fund program (SRF), and pending legislation to estimate the costs associated with the funding of this program and the resulting impact upon users within the service area.

It should also be noted that for the purpose of simplification, this CIP does not include the financing costs associated with new debt in the individual project description sheets. These costs are reflected in the debt service calculations.

SIGNIFICANT CAPITAL PROJECTS

Contract 302: Phase I Combined Sewer Overflow (CSO) Facilities

The Fiscal Year 2004 – 2008 Capital Improvement Plan reflects NBC's primary strategic focus with the ongoing construction of the Combined Sewer Overflow Abatement Project (CSO). The CSO project is the most extensive capital initiative for NBC since the NBC was founded in 1980. Development of the CSO control plan was a requirement of the federal Clean Water Act and Rhode Island's water quality regulations and incorporated the input of more than 40 stakeholders over a two-year period.

Providence, Pawtucket and Central Falls have combined sewers that overflow at approximately 66 locations during significant wet weather events. NBC's Combined Sewer Overflow (CSO) Project will mitigate the impact of these overflows through the construction of wet weather control facilities. The project will improve water quality in and around the greater Providence metropolitan area and the Upper Bay by controlling the discharge of sewage from combined sewer overflows during and after storm events.

Phase I of the program includes the design and construction of a 16,000 foot main spine tunnel and pump station. It is projected that these facilities will reduce the overflow volume by approximately 40 percent and, as a result, reduce conditional closures of fertile shell-fishing areas by 40 percent in the Upper Bay and 78 percent in the Lower Bay.

Phases II and III will address the remaining CSOs that discharge to the Woonasquatucket, Moshassuck, West, Seekonk, and Blackstone Rivers. Phase II of the CSO plan will include CSO interceptors to transport flows from remote CSOs to the tunnel, sewer separation, and a constructed wetlands treatment facility. Phase III will include the Pawtucket Tunnel, CSO interceptors, and sewer separation. The remaining outfalls that have smaller CSO flows will be either blocked or controlled according to federally accepted methods.

Given the CSO project's complexity and magnitude, it is difficult to estimate its costs and cash flows. As the project has moved from design to construction, and as more information becomes available, costs and schedules have been modified. In this CIP, the CSO project represents 67% of the total costs included.

The description, schedule, and costs reflected in the detailed portion of the project listings in this document are for the first phase only. At the end of this phase, the NBC is committed to a two-year re-evaluation period to evaluate the water quality improvements and reassess the technologies to determine if future phases of the plan should be modified. The NBC has fully explored all available alternatives for satisfying the Federal Clean Water Act mandate to eliminate or mitigate the CSOs in its service area. The stakeholder process, along with the assistance of The Louis Berger Group, has resulted in a program that will impose the least cost burden on NBC's ratepayers while meeting regulatory requirements.

Contract 807: Bucklin Point Wastewater Treatment Facility Improvements

Construction began in March 2002 on Contract 807, the second largest project underway at the NBC. This project will result in a complete modernization of the Bucklin Point Wastewater Treatment Facility. The last major improvements to the plant occurred in 1973 when it was upgraded to secondary treatment. Current planned improvements include increasing wet weather capacity to 116 MGD (million gallons per day) along with a new influent pumping station, screening and grit handling facilities and dry weather primary settling tanks. The project also entails the conversion of the existing primary tanks to wet weather treatment, the conversion to a fine bubble aeration system, and includes ultra-violet disinfection facilities, a new effluent pumping station for dry weather flows, and a new plant instrumentation and control system.

FINANCING

Given the significant costs and benefits of the CSO program, the NBC has been working hand in hand with officials at both the state and federal level to obtain financial assistance.

In November 2000, Rhode Island voters overwhelmingly approved a \$60 million state bond issue that will be used by the Rhode Island Clean Water Finance Agency (RICWFA) to fund over \$210 million in zero interest loans to municipalities and agencies with wastewater infrastructure needs. Of the total zero interest loan amount the referendum entitles the NBC to a minimum of \$70 million in zero interest loans.

The RICWFA has been refining the structure of their “zero interest” loan program. As it stands now, the \$57 million in general obligation bond proceeds has been loaned directly to the NBC at the traditional subsidized rate. Additional loans will be made to qualifying borrowers, including NBC, at a blended rate of zero percent and the traditional subsidized rate. NBC expects to receive the first blended rate loan in FY 2003. NBC’s ratepayers will benefit significantly from this new program.

In addition, the NBC has been working closely with its federal delegation to obtain financial assistance. These efforts have been rewarded. In FY 2001, the NBC received a \$1 million federal appropriation. In fiscal year 2002, the NBC was the recipient of a \$3.25 million federal appropriation. This is reflected in FY 2003 funding for CSO Project 302.06C. The NBC continues to lobby at the federal level to help mitigate ratepayer impact from the capital program.

PROGRAM CHANGES, CURRENT AND FUTURE

The following contracts have been removed from this year’s CIP:

Completed Projects:

- Contract 104C: Septage Receiving Facilities
- Contract 109.02: Evaluation of Grit Removal Facilities at FPWWTF
- Contract 302.04C: Phase I CSO Facilities - MRI
- Contract 302.05C: Phase I CSO Facilities - Floatables Control Demonstration Facility
- Contract 302.07C: Phase I CSO Facilities - Preparation of Workshaft Site Termination
- Contract 302.20: Phase I CSO Facilities – Land Acquisition RIDOT
- Contract 304.03: Saylesville Pump Station Force Main Repair
- Contract 904: NBC Corporate Office Building, Lab & IM Building

The presentation of the Phase I facilities of the CSO abatement project reflects some additional contracts. NBC's Owner Controlled Insurance Program (OCIP), previously included as part of contract 302.06C is now reflected as a separate contract. The OCIP was determined to be a more efficient and effective method of insuring the CSO construction contracts. In addition, due to the complex nature of Contract 302.08C, this contract has been split into two separate construction contracts. Contract 302.08C addresses overflows 004/061 and 302.15C addresses overflows 006/007.

Contract 103 has also been modified from last year's CIP and is now defined as the demolition of Field's Point Incinerating Facilities. This project was originally envisioned as a long-term solution to solids handling for NBC and it included dewatering and incineration improvements. Subsequent to the original development of the project, the NBC began negotiations with the Rhode Island Resource Recovery Corporation (RIRRC) for the disposal of solids as part of a new regional solids handling facility. Assuming the permitting, financing, and construction of a regional sludge disposal facility is successful, NBC would demolish the existing filter building, the interim solids handling building and one of the two incinerators (contract 103C). If, however, the regional facility is not feasible, NBC will be required to make the capital improvements originally designed as Contract 103 to refurbish these facilities. Costs for these improvements range from \$10 to \$12 million, a significant impact on future capital requirements.

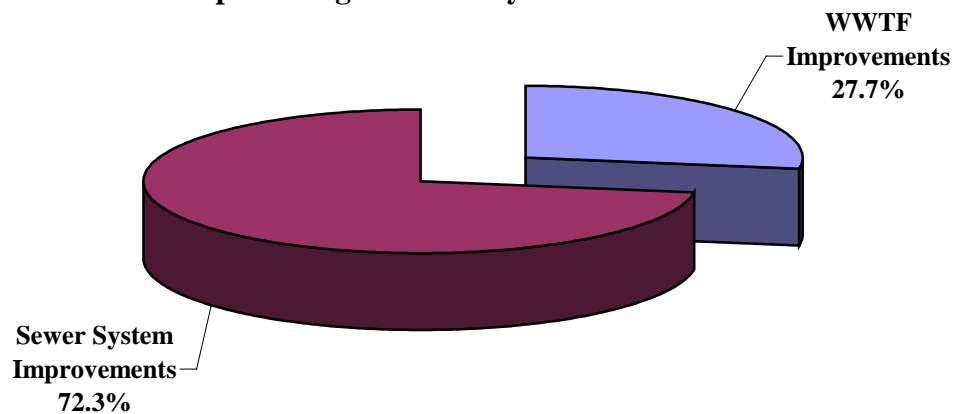
COSTS BY FUNCTIONAL AREA

The capital projects have been assigned to functional area as follows:

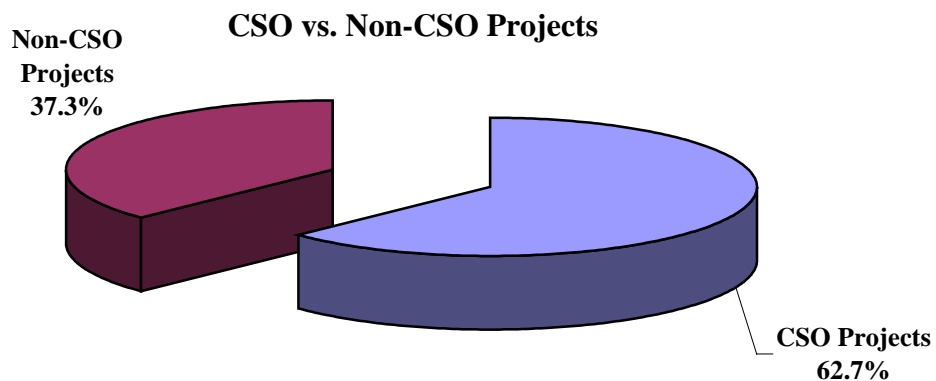
Field's Point and Bucklin Point Wastewater Treatment Facility (WWTF) improvements include the contracts related to facility improvements, laboratory, septage receiving and various facility maintenance projects. Sewer System Improvements (SSI) include the Combined Sewer Overflow project, interceptor rehabilitation, sewer construction, and pumping station improvements.

Of the \$333.9 million in capital improvements scheduled over the five year period fiscal years 2004 - 2008, 72.3% or \$241.6 million are in the sewer system category and 27.7% or \$92.3 million are for wastewater treatment facility improvements. These costs are depicted in the chart on the following page.

Capital Program Cost By Functional Area

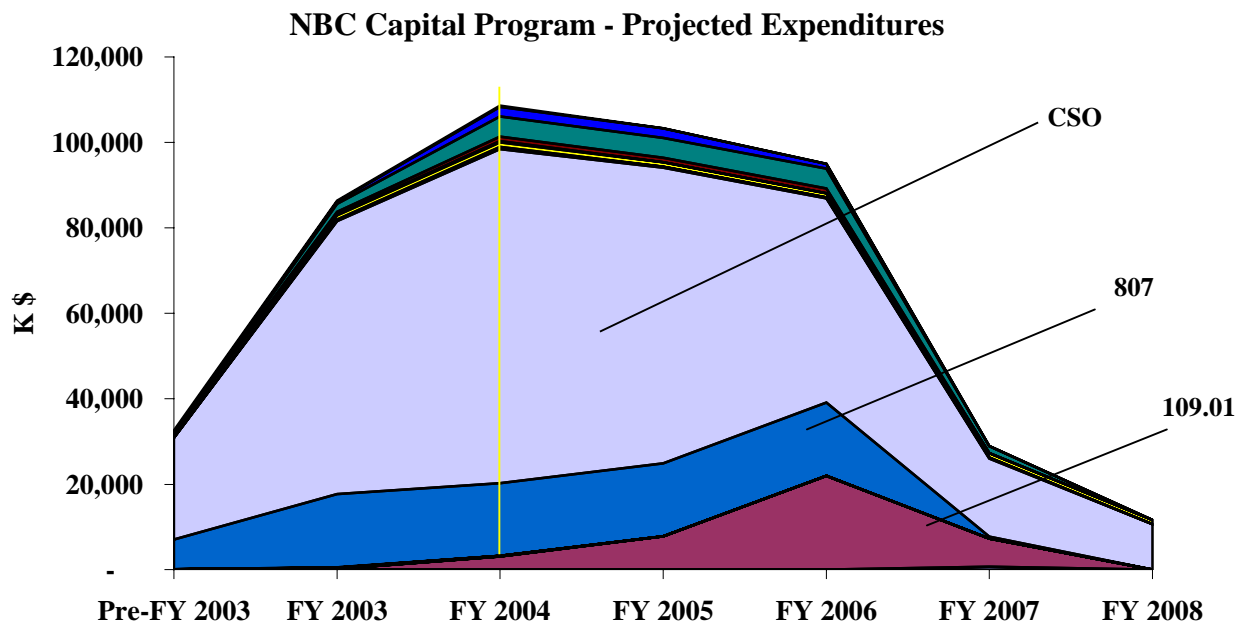


To readily view the magnitude of the CSO program, the chart below shows the CSO program related costs account for \$209.3 million or 62.7% of the five-year FY 2004 - FY 2008 capital program.



CASH FLOWS

The area graph below illustrates the impact of the major capital projects contained in this year's CIP on overall cash flows. This representation also allows for the analysis of cash flows over time. Due to size and scale constraints, the fourteen separate CSO Phase I projects have been consolidated in this graph.



The estimated cost of the projects identified in this year's capital program is approximately \$334 million during FY 2004 - FY 2008.

NBC will be funding the CSO through SRF funds as the least costly alternative and will utilize the SRF program as its primary source of funding for NBC's other capital projects as well. Due to capacity limitations of the SRF program, the NBC will be using interim financing mechanisms to meet cash flow needs. This program shows the expenditure of \$332.8 million in SRF funds during fiscal years 2004 through 2008.

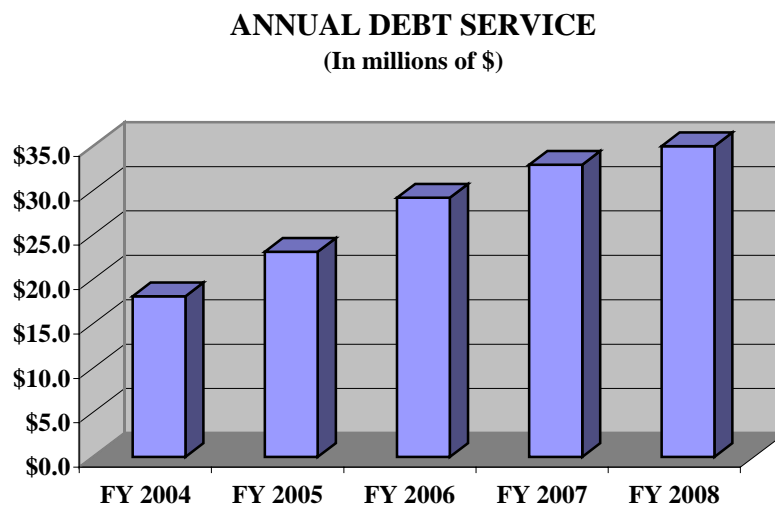
In addition, this year's CIP includes a concept called *pay as you go* financing in its debt service calculations. The pay as you go concept is derived from NBC's policy of establishing rates that will generate 125% of debt service. The additional coverage is essentially required by bond rating agencies for NBC to maintain its credit rating. The NBC recently received an upgrade in its bond rating by Standard and Poor's from an A to an A+ and one of the items cited was NBC's debt service coverage policy.

Currently, the NBC deposits the additional debt service coverage in a restricted cash account. We will be requesting authority from the Rhode Island Public Utilities Commission (PUC) to use the surplus funds to pay directly for capital needs once the

coverage requirement has been met. This process will allow the NBC to mitigate ratepayer impact by reducing overall debt.

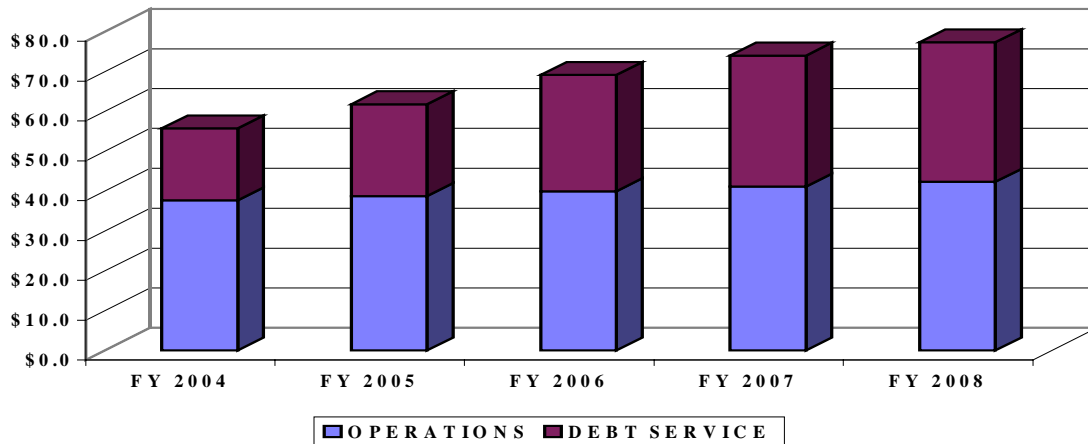
IMPACT ON TOTAL ANNUAL REVENUE REQUIREMENTS AND SEWER USER FEES

As the NBC proceeds with the construction phase of the CSO abatement project and financing resources become more costly, the impact of the capital program on NBC's budget and ultimately its users becomes more significant. In order to assess the fiscal impact of the improvements, debt service payments have been estimated from the cash flow projections. As shown graphically below, annual debt service increases from \$18.1 million in fiscal year 2004 to \$35 million in fiscal year 2008.



Assuming an increase of 3% per year to the operating budget (less debt service) and beginning in fiscal year 2004, NBC's total revenue requirement will increase from \$55.7 million in FY 2004 to approximately \$77.3 million in fiscal year 2008. Of this amount, debt service would account for 32.5% of the total requirement in FY 2004 and approximately 45.2% of the total requirement in FY 2008, as shown in the following graph.

ANNUAL REVENUE REQUIREMENT
(In Millions of \$)



SEWER USER FEES

The PUC regulates the NBC. Any modifications to NBC user fees are subject to a lengthy review and approval process by the PUC. In FY 2002 NBC applied for, and was granted, rate relief for debt service, with new rates being effective June 6th, 2002. NBC's newly approved revenue requirement is \$45.5 million including an allowance of \$20.4 million for debt service and debt service coverage. Further rate relief will be required over time in order to fund the debt service generated by this capital program.

A comparison of NBC's current residential sewer rates with other Rhode Island Communities can be found in the Appendix section of this document.

When compared with an annual survey on residential sewer charges for major U.S. Cities (conducted by the Massachusetts Water Resource Authority (MWRA)), the current NBC average rate of \$204.67 is 31% below the national average. An illustration of this survey is located in the Appendix section of this document.

Wastewater Treatment Facility Projects

Contract: 103.00C

Demolition of Field's Point Incinerating Facilities

Project Manager: Teresa Cote

Description:

This project anticipates the permitting and financing of a regional sludge disposal facility in accordance with an agreement between the NBC and the Rhode Island Resource Recovery Corporation (RIRRC). If the regional facility is constructed NBC will no longer incinerate sludge at its Field's Point facility, and this project will be implemented.

The expenditures included for Contract 103.00C in this capital plan represent the costs for demolition of the existing filter building, the interim solids handling building and one of the two incinerators. These facilities will be demolished once the new RIRRC facility is operational.

Reason for Project/Benefits:

The existing buildings are beyond their useful life and in need of extensive repair. Once the buildings are demolished, the space may be used for either parking or additional process facilities.

Status of On-going Project:

Design Phase.

103.00C - Project Cost by Phase						
	Duration					Cost
Planning	From:	Jul-03	To:	Dec-03	(5 Months)	50
Design	From:	Oct-04	To:	Feb-05	(4 Months)	100
Construction	From:	Jul-06	To:	Nov-06	(4 Months)	660
Total						810

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning			50					50
A&E/Professional				100				100
Land Acquisition								-
Site Improvement								-
Construction						600		600
Contingency						60		60
Other								-
Total Project Costs	-	-	50	100	-	660	-	810

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund			50	100		660		810
State Aquafund Grants								-
Total Financing	-	-	50	100	-	660	-	810

* Cash Flow Basis in Thousands (000's)

Contract: 109.01P

Field's Point Wastewater Treatment Facility Plan Amendment for Nitrogen Removal

Project Manager: Teresa Cote

Description:

It is anticipated that future revisions to the Field's Point Wastewater Treatment Facility permit will require the attainment of new standards for nitrogen and ammonia. The facilities plan amendment will determine how to achieve these standards. The facilities plan for nitrogen removal could not be completed in FY 02 because the criteria needed to complete the planning was not available from the Rhode Island Department of Environmental Management (RIDEM). RIDEM is in the process of completing a study to assign a nitrogen load limit to the Field's Point facility, however the NBC will not be able to complete its facilities plan until that study is complete. Costs for these facilities could range from \$13.5 - \$68 million, depending on RIDEM requirements. This capital plan reflects the estimate for the mid-range cost alternative.

Reason for Project/Benefits:

Improvements are needed at NBC facilities to meet new permit requirements for nitrogen.

Status of On-going Project:

The planning phase was initiated for nitrogen removal.

109.01P - Project Cost by Phase						
	Duration					Cost
Planning	From: Apr-01	To: Jun-03	(20 Months)			368
Design	From: Jul-03	To: Jun-04	(12 Months)			3,000
Construction	From: Jan-05	To: Jan-07	(24 Months)			36,300
Total						39,668

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning	219	149						368
A&E/Professional			3,000					3,000
Land Acquisition								-
Site Improvement								-
Construction				7,000	20,000	6,000		33,000
Contingency				700	2,000	600		3,300
Other								-
Total Project Costs	219	149	3,000	7,700	22,000	6,600	-	39,668

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund	139	117	3,000	7,700	22,000	6,600		39,556
State Aquafund Grants	80	32						112
Total Financing	219	149	3,000	7,700	22,000	6,600	-	39,668

* Cash Flow Basis in Thousands (000's)

Contract: 109.03C

Odor Control at Field's Point WWTF

Project Manager: Teresa Cote

Description:

A facilities plan amendment for odor control at FPWWTF was completed under contract 109.01. The delay in developing nitrogen limits necessitated that this project be broken out from contract 109.01 so that it could proceed to design for odor control improvements.

Reason for Project/Benefits:

To reduce or eliminate odor sources at the FPWWTF.

Status of On-going Project:

The planning phase has been completed. Ready to begin design.

109.03C - Project Cost by Phase				
	Duration			Cost
Planning	From:	To:		
Design	From: Jul-02	To: Sep-02	(3 Months)	10
Construction	From: Nov-03	To: Aug-03	(11 Months)	54
Total				64

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition								-
Site Improvement								-
Construction			32	8				40
Contingency			4					4
Other		10	8	2				20
Total Project Costs	-	10	44	10	-	-	-	64

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund		10	44	10				64
State Aquafund Grants								-
Total Financing	-	10	44	10	-	-	-	64

* Cash Flow Basis in Thousands (000's)

Contract: 113.01P
Incinerator Permitting
Project Manager: Teresa Cote

Description:

In order to comply with RIDEM requirements to operate the Field's Point sludge incinerator, dispersion modelling, and possibly stack emissions testing, must be conducted. The results of this work will determine if any further improvements will be needed for the incinerator in order to comply with RIDEM requirements. More funding may be required to comply with permit requirements.

Reason for Project/Benefits:

To determine compliance with RIDEM requirements and to allow NBC to continue to operate its sludge incinerator.

Status of On-going Project:

To begin in FY 2003.

113.01P - Project Cost by Phase				
	Duration			Cost
Planning	From: Aug-02	To: Oct-02	(3 months)	23
Design	From: Jan-03	To: Mar-03	(3 months)	25
Construction	From: Jul-03	To: Dec-03	(6 months)	165
Total				213

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional		48						48
Land Acquisition								-
Site Improvement								-
Construction			150					150
Contingency			15					15
Other								-
Total Project Costs	-	48	165	-	-	-	-	213

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds		48						48
State Revolving Fund			165					165
State Aquafund Grants								-
Total Financing	-	48	165	-	-	-	-	213

* Cash Flow Basis in Thousands (000's)

Contract: 114.00

Water Quality Background Monitoring of the NBC Receiving Waters and WWTF Including Nutrients

Project Manager: Sharon Pavignano

Description:

In accordance with RIPDES Permits, background monitoring for the CSO Abatement and Bucklin Point Upgrades and TMDL development, NBC will design and conduct a long term monitoring program of the Providence, Seekonk and tidal portions of the Moshassuck and Woonasquatucket Rivers. The study will include physical parameters, analysis for nutrients, trace metals and bacteria, biological surveys and a bioaccumulation study.

A nutrient analyzer will be purchased and increase NBC's analytical capabilities to include the analysis of seawater samples and the analysis of WWTF and river samples for a greater number of nutrient parameters and to a lower detection level.

Reason for Project/Benefits:

This program will allow the NBC to better define pollutant levels in the receiving waters of WWTFs and CSOs to determine effluent quality necessary to minimize impacts on the receiving waters. It will also serve to provide background information on water quality for future assessment of the CSO Abatement and treatment plant improvements.

This project will allow the NBC to better define nutrient levels in WWTF effluent and the receiving waters and to determine the effluent quality necessary to minimize impacts on the receiving waters. It will in addition, allow the NBC to move in a direction of acting as a regional lab for nutrients and to assist other WWTFs in Rhode Island.

Status of On-going Project:

New project in support of on-going WWTF upgrade, CSO abatement and TMDL programs.

Project Cost by Phase				
Planning Design Construction	From:	Sep-02	To:	Mar-04
	From:		To:	
	From:		To:	
				462
Total				462

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								0
A&E/Professional		58	40					98
Land Acquisition								0
Site Improvement								0
Construction								0
Contingency			50					50
Other		314						314
Total Project Costs	-	372	90	-	-	-	-	462

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								0
Federal Grant								0
Bay Bonds								0
State Revolving Fund		372	90					462
State Aquafund Grants								0
Total Financing	-	372	90	-	-	-	-	462

* Cash Flow Basis in Thousands (000's)

Contract: 115.00P

Asset Management System

Project Manager: Ray Marshall

Description:

An Asset Management System (AMS) will evaluate the NBC's collection and treatment facilities, establishing methods to account for and link inventory, condition, service levels, useful life, and repair costs. This will produce insights regarding where, how much, and when to invest in system maintenance, rehabilitation and replacement.

Reason for Project/Benefits:

Asset Management Systems provide a means of managing infrastructure to minimize the cost of owning and operating wastewater collection treatment facilities while delivering the service levels customers expect.

Status of On-going Project:

Project initial stages just beginning.

115.00P - Project Cost by Phase						
Planning Design Construction	From: From: From:	Oct. 02	To: To: To:	Jun-04	Duration 20 months	Cost 200
Total						200

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning		25	50					75
A&E/Professional		50	75					125
Land Acquisition								-
Site Improvement								-
Construction								-
Contingency								-
Other								-
Total Project Costs	-	75	125	-	-	-	-	200

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund		75	125					200
State Aquafund Grants								-
Total Financing	-	75	125	-	-	-	-	200

* Cash Flow Basis in Thousands (000's)

Contract: 807.00C

BPWWTF CSO Facilities and Other Improvements

Project Manager: Rich Bernier

Description:

A Facilities Plan Amendment has been completed to evaluate improvements needed at the Bucklin Point WWTF to provide wet weather capacity of 116 MGD during storms and secondary capacity of 46 MGD over sustained periods of time. Improvements include a new influent pumping station, screening and grit handling facilities, dry weather primary settling tanks, effluent pumping station for dry weather flows, as well as plant instrumentation and control systems. It also includes conversion of the existing primary tanks to wet weather treatment and conversion to a fine bubble aeration system. UV disinfection facilities are also included in this project.

Reason for Project/Benefits:

The majority of these improvements are required under the RIPDES permit. Other improvements required as useful life of equipment is reached and equipment needs replacement.

Status of On-going Project:

Construction Phase.

807.00C - Project Cost by Phase							
Planning Design Construction	Duration						Cost
	From:	Dec-95	To:	Oct-98	(34 Months)		495
	From:	Feb-98	To:	Jul-01	(41 Months)		3,864
	From:	Jan-02	To:	Jan-06	(48 Months)		71,456
Total							75,815

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning	495							495
A&E/Professional	3,864							3,864
Land Acquisition								-
Site Improvement								-
Construction	2,618	15,545	15,545	15,546	15,546	400		65,200
Contingency		1,554	1,554	1,554	1,554	40		6,256
Other								-
Total Project Costs	6,977	17,099	17,099	17,100	17,100	440	-	75,815

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund	6,977	17,099	17,099	17,100	17,100	440		75,815
State Aquafund Grants								-
Total Financing	6,977	17,099	17,099	17,100	17,100	440	-	75,815

* Cash Flow Basis in Thousands (000's)

Sewer System Improvements

Contract: 302.03D

Phase I Combined Sewer Overflow (CSO) Facilities

Project Manager: Thomas Brueckner

Description:

Providence, Pawtucket and Central Falls have combined sewers that overflow at approximately 66 locations during wet weather. This Combined Sewer Overflow (CSO) Program will mitigate the impact of these overflows through the construction of wet weather control facilities. The proposed program consists of two tunnels, the Main Spine tunnel (16,000 ft. long) and the Pawtucket tunnel (13,000 ft. long), two tunnel pump stations, five CSO interceptors and twelve sewer separation projects. Contract 302.03D includes design of the Phase I facilities, the Main Spine tunnel and pump station, and is expected to be completed in about seven years. The construction of the Phase I facilities is reflected in a number of separate contracts in this submittal. Upon completion of the construction of Phase I, the proposed Phase II facilities will be reassessed to determine if any changes should be made to the plan.

Reason for Project/Benefits:

This project is a result of a federal mandate requiring clean up of approximately 66 combined sewer overflows (CSO's) which contribute to the degradation of the Narragansett Bay. During periods of heavy rain, the flow through the combined portions of the NBC's collection system frequently exceeds the capacity of the system. As a result, untreated sewage and stormwater mixture enters rivers and Narragansett Bay. These overflows have been a continual source of pollution in the Upper Bay often requiring RIDEM to close parts of the Bay to shellfishing. This CSO Abatement Project would mitigate this problem.

Status of On-going Project:

Final design of Phase I is complete except for the tunnel pump station. This is expected to be complete by July 2004. Revisions to the final plans will be made prior to this contract being sent out to bid. Construction of Contract 302.04C – CSO Phase I facilities MRI began in May, 2001. Construction of the Main Spine Tunnel began in Fall, 2001.

302.03D - Project Cost by Phase			
Planning Design Construction	From:	To:	Duration (72 Months) Cost 14,853
	From: Jul-98	To: Jun-04	
	From:	To:	
Total			14,853

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional	11,739	200	83					12,022
Land Acquisition	1,398							1,398
Site Improvement								-
Construction								-
Contingency								-
Other	1,327	79	27					1,433
Total Project Costs	14,464	279	110	-	-	-	-	14,853

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds	9,047							9,047
State Revolving Fund	5,417	279	110					5,806
State Aquafund Grants								-
Total Financing	14,464	279	110	-	-	-	-	14,853

* Cash Flow Basis in Thousands (000's)

Contract: 302.03RS

Phase I CSO Facilities - Program and Construction Management

Project Manager: Rich Bernier

Description:

This contract is to provide for Program Management and Construction Management of the Phase I CSO Facilities construction program, which consists of twelve (12) separate construction contracts.

Reason for Project/Benefits:

This project is a result of a federal mandate requiring clean up of approximately 70 combined sewer overflows (CSO's) which contribute to the degradation of the Narragansett Bay. During periods of heavy rain, the flow through the combined portions of the NBC's collection system frequently exceeds the capacity of the system. As a result, untreated sewage and stormwater mixture enters rivers and Narragansett Bay. These overflows have been a continual source of pollution in the Upper Bay often requiring RIDEM to close parts of the Bay to shellfishing. This CSO Abatement Project would mitigate this problem.

Status of On-going Project:

Construction began in the Fall of 2001.

302.03RS - Project Cost by Phase			
	Duration		Cost
Planning	From:	To:	
Design	From:	To:	
Construction	From: May-01	To: May-08 (84 Months)	30,250
Total			30,250

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition								-
Site Improvement								-
Construction	1,460	5,800	5,800	5,800	4,800	4,800	1,790	30,250
Contingency								-
Other								-
Total Project Costs	1,460	5,800	5,800	5,800	4,800	4,800	1,790	30,250

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant	1,000							1,000
Bay Bonds								-
State Revolving Fund	460	5,800	5,800	5,800	4,800	4,800	1,790	29,250
State Aquafund Grants								-
Total Financing	1,460	5,800	5,800	5,800	4,800	4,800	1,790.00	30,250

* Cash Flow Basis in Thousands (000's)

Contract: 302.06C

Phase I CSO Facilities - Main Spine Tunnel and Ancillary Facilities

Project Manager: Richard Bernier

Description:

The construction of the Phase I CSO facilities is currently allocated over twelve (12) separate construction contracts. Contract 302.06C is for the construction of a 16,000 foot tunnel that is 26 feet finished diameter, in bedrock. This contract includes the construction of two 26 foot diameter workshafts, excavation of the tunnel pump station chamber 300 feet below ground and an 11 foot diameter equipment shaft. It also includes a 32 foot diameter utility shaft for the tunnel pump station and a 9 foot diameter dropshaft for overflow 067. The construction will begin near Ernest Street and terminate at Calverly Street.

Reason for Project/Benefits:

This project is a result of a federal mandate requiring clean up of approximately 70 combined sewer overflows (CSO's) which contribute to the degradation of the Narragansett Bay. During periods of heavy rain, the flow through the combined portions of the NBC's collection system frequently exceeds the capacity of the system. As a result, untreated sewage and stormwater mixture enters rivers and Narragansett Bay. These overflows have been a continual source of pollution in the Upper Bay often requiring RIDEM to close parts of the Bay to shellfishing. This CSO Abatement Project would mitigate this problem.

Status of On-going Project:

Construction began in January 2002 and is scheduled to be completed in March 2006.

302.06C - Project Cost by Phase			
	Duration		Cost
Planning	From:	To:	
Design	From:	To:	
Construction	From: Jan-02	To: Mar-06 (50 Months)	180,171
Total			180,171

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition		50						50
Site Improvement								-
Construction	4,752	54,594	50,914	38,223	15,696			164,179
Contingency		5,459	5,091	3,822	1,570			15,942
Other								-
Total Project Costs	4,752	60,103	56,005	42,045	17,266	-	-	180,171

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant		3,182						3,182
Bay Bonds		3,002						3,002
State Revolving Fund	4,752	53,919	56,005	42,045	17,266			173,987
State Aquafund Grants								-
Total Financing	4,752	60,103	56,005	42,045	17,266	-	-	180,171

* Cash Flow Basis in Thousands (000's)

*actual from 2002

Contract: 302.0600

Phase I CSO Facilities - Owner Controlled Insurance Program

Project Manager: Richard Bernier

Description:

The construction of the Phase I CSO facilities will be done under ten (10) separate construction contracts. This contract covers the cost for liability insurance on all CSO construction activities.

Reason for Project/Benefits:

This project is a result of a federal mandate requiring clean up of approximately 70 combined sewer overflows (CSO's) which contribute to the degradation of the Narragansett Bay. During periods of heavy rain, the flow through the combined portions of the NBC's collection system frequently exceeds the capacity of the system. As a result, untreated sewage and stormwater mixture enters rivers and Narragansett Bay. These overflows have been a continual source of pollution in the Upper Bay often requiring RIDEM to close parts of the Bay to shellfishing. This CSO Abatement Project would mitigate this problem.

Status of On-going Project:

Construction began in January 2002 and is scheduled to be completed in March 2006. Insurance coverage extends over the duration of construction.

302.0600 - Project Cost by Phase			
	Duration		Cost
Planning	From:	To:	
Design	From:	To:	
Construction	From: Jan-02	To: Mar-06 (50 Months)	14,187
Total			14,187

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition								-
Site Improvement								-
Construction								-
Contingency								-
Other	5,477	1,809	1,871	1,871	1,871	1,288		14,187
Total Project Costs	5,477	1,809	1,871	1,871	1,871	1,288	-	14,187

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund	5,477	1,809	1,871	1,871	1,871	1,288		14,187
State Aquafund Grants								-
Total Financing	5,477	1,809	1,871	1,871	1,871	1,288	-	14,187

* Cash Flow Basis in Thousands (000's)

Contract: 302.08C

Phase I CSO Facilities - Overflows 004/061

Project Manager: Richard Bernier

Description:

Contract 302.08C is for the construction of one (1) dropshaft to the tunnel, associated gate and screening structures, diversion chambers and consolidation piping. The work will be conducted in Allens Avenue, between Henderson and Public Streets.

Reason for Project/Benefits:

This project is a result of a federal mandate requiring clean up of approximately 70 combined sewer overflows (CSO's) which contribute to the degradation of the Narragansett Bay. During periods of heavy rain, the flow through the combined portions of the NBC's collection system frequently exceeds the capacity of the system. As a result, untreated sewage and stormwater mixture enters rivers and Narragansett Bay. These overflows have been a continual source of pollution in the Upper Bay often requiring RIDEM to close parts of the Bay to shellfishing. This CSO Abatement Project would mitigate this problem.

Status of On-going Project:

Construction is expected to begin in June 2002 and to be completed in September 2003.

302.08C - Project Cost by Phase			
	Duration		Cost
Planning	From:	To:	
Design	From:	To:	
Construction	From: Jun-02	To: Sep-03 (15 Months)	8,245
Total			8,245

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition		50						50
Site Improvement								-
Construction		5,210	2,200	40				7,450
Contingency		521	220	4				745
Other								-
Total Project Costs	-	5,781	2,420	44	-	-	-	8,245

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds		50						50
State Revolving Fund		5,731	2,420	44				8,195
State Aquafund Grants								-
Total Financing	-	5,781	2,420	44	-	-	-	8,245

* Cash Flow Basis in Thousands (000's)

Contract: 302.09C

Phase I CSO Facilities - Overflow 009 and Emergency Overflow Structure

Project Manager: Richard Bernier

Description:

Contract 302.09C is for the construction of one dropshaft to the tunnel, the associated gate and screening structure, diversion chamber and consolidation piping. Overflow 009 will be diverted to the dropshaft, which will also serve as the emergency overflow structure for the tunnel. The work will be conducted in the vicinity of Dyer Street.

Reason for Project/Benefits:

This project is a result of a federal mandate requiring clean up of approximately 70 combined sewer overflows (CSO's) which contribute to the degradation of the Narragansett Bay. During periods of heavy rain, the flow through the combined portions of the NBC's collection system frequently exceeds the capacity of the system. As a result, untreated sewage and stormwater mixture enters rivers and Narragansett Bay. These overflows have been a continual source of pollution in the Upper Bay often requiring RIDEM to close parts of the Bay to shellfishing. This CSO Abatement Project would mitigate this problem.

Status of On-going Project:

Construction is expected to begin in September 2003 and to be completed in October 2004.

302.09C - Project Cost by Phase			
Planning Design Construction	From:	To:	Duration (13 Months)
	From:	To:	
	From: Sep-02	To: Oct-04	
Total			6,487

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition			750					750
Site Improvement								-
Construction			3,600	1,615				5,215
Contingency			360	162				522
Other								-
Total Project Costs	-	-	4,710	1,777	-	-	-	6,487

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds			750					750
State Revolving Fund			3,960	1,777				5,737
State Aquafund Grants								-
Total Financing	-	-	4,710	1,777	-	-	-	6,487

* Cash Flow Basis in Thousands (000's)

Contract: 302.10C

Phase I CSO Facilities - Overflow 032

Project Manager: Richard Bernier

Description:

Contract 302.10C is for the construction of one dropshaft to the tunnel, associated gate and screening structure, and diversion chamber and consolidation piping for overflow 032. The work will be conducted in Charles Street, from Ashburton Street to south of Orms Street.

Reason for Project/Benefits:

This project is a result of a federal mandate requiring clean up of approximately 70 combined sewer overflows (CSO's) which contribute to the degradation of the Narragansett Bay. During periods of heavy rain, the flow through the combined portions of the NBC's collection system frequently exceeds the capacity of the system. As a result, untreated sewage and stormwater mixture enters rivers and Narragansett Bay. These overflows have been a continual source of pollution in the Upper Bay often requiring RIDEM to close parts of the Bay to shellfishing. This CSO Abatement Project would mitigate this problem.

Status of On-going Project:

Construction is expected to begin in November 2003 and to be completed in September 2004.

302.10C - Project Cost by Phase			
	Duration		Cost
Planning	From:	To:	
Design	From:	To:	
Construction	From: Nov-03	To: Sep-04 (12 Months)	7,000
Total			7,000

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition			400					400
Site Improvement								-
Construction			4,500	1,500				6,000
Contingency			450	150				600
Other								-
Total Project Costs	-	-	5,350	1,650	-	-	-	7,000

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds			400					400
State Revolving Fund			4,950	1,650				6,600
State Aquafund Grants								-
Total Financing	-	-	5,350	1,650	-	-	-	7,000

* Cash Flow Basis in Thousands (000's)

Contract: 302.11C

Phase I CSO Facilities - Woonasquastucket Interceptor Relief

Project Manager: Richard Bernier

Description:

Contract 302.11C is for the construction of one dropshaft to the tunnel, the associated gate and screening structure, and diversion chamber and consolidation piping. This project will provide relief of the Woonasquastucket River Interceptor to the tunnel. It will relieve surcharging in this interceptor and reduce upstream overflows that will not be eliminated until Phase II of the CSO program. This work will take place at the intersection of Promenade Street and Bath Street.

Reason for Project/Benefits:

This project is a result of a federal mandate requiring clean up of approximately 70 combined sewer overflows (CSO's) which contribute to the degradation of the Narragansett Bay. During periods of heavy rain, the flow through the combined portions of the NBC's collection system frequently exceeds the capacity of the system. As a result, untreated sewage and stormwater mixture enters rivers and Narragansett Bay. These overflows have been a continual source of pollution in the Upper Bay often requiring RIDEM to close parts of the Bay to shellfishing. This CSO Abatement Project would mitigate this problem.

Status of On-going Project:

Construction is expected to begin in March 2003 and to be completed in February 2004.

302.11C - Project Cost by Phase			
	Duration		Cost
Planning	From:	To:	
Design	From:	To:	
Construction	From: Mar-03	To: Feb-04 (12 Months)	4,600
Total			4,600

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition		200						200
Site Improvement								-
Construction		1,500	2,500					4,000
Contingency		150	250					400
Other								-
Total Project Costs	-	1,850	2,750	-	-	-	-	4,600

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds		200						200
State Revolving Fund		1,650	2,750					4,400
State Aquafund Grants								-
Total Financing	-	1,850	2,750	-	-	-	-	4,600

* Cash Flow Basis in Thousands (000's)

Contract: 302.12C

Phase I CSO Facilities - Overflow 067

Project Manager: Richard Bernier

Description:

Contract 302.12C is for the construction of the tunnel, gate and screening structure, diversion chamber and consolidation piping for Overflow 067. This work will be conducted in Ernest Street.

Reason for Project/Benefits:

This project is a result of a federal mandate requiring clean up of approximately 70 combined sewer overflows (CSO's) which contribute to the degradation of the Narragansett Bay. During periods of heavy rain, the flow through the combined portions of the NBC's collection system frequently exceeds the capacity of the system. As a result, untreated sewage and stormwater mixture enters rivers and Narragansett Bay. These overflows have been a continual source of pollution in the Upper Bay often requiring RIDEM to close parts of the Bay to shellfishing. This CSO Abatement Project would mitigate this problem.

Status of On-going Project:

Construction is expected to begin in August 2005 and to be completed in September 2006.

302.12C - Project Cost by Phase			
	Duration		Cost
Planning	From:	To:	
Design	From:	To:	
Construction	From: Aug-05	To: Oct-06 (14 Months)	4,510
Total			4,510

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition								-
Site Improvement								-
Construction					2,800	1,300		4,100
Contingency					280	130		410
Other								-
Total Project Costs	-	-	-	-	3,080	1,430	-	4,510

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund					3,080	1,430		4,510
State Aquafund Grants								-
Total Financing	-	-	-	-	3,080	1,430	-	4,510

* Cash Flow Basis in Thousands (000's)

Contract: 302.13C

Phase I CSO Facilities - Regulator Modifications

Project Manager: Richard Bernier

Description:

Contract 302.13C involves construction of modifications to the regulator structures at overflows 012, 013, 016, 042, 043 and 044. These modifications will allow these overflows to be diverted to existing interceptors. This work will take place along the Woonasquatucket River, South Water Street and Hay Market Square.

Reason for Project/Benefits:

This project is a result of a federal mandate requiring clean up of approximately 70 combined sewer overflows (CSO's) which contribute to the degradation of the Narragansett Bay. During periods of heavy rain, the flow through the combined portions of the NBC's collection system frequently exceeds the capacity of the system. As a result, untreated sewage and stormwater mixture enters rivers and Narragansett Bay. These overflows have been a continual source of pollution in the Upper Bay often requiring RIDEM to close parts of the Bay to shellfishing. This CSO Abatement Project would mitigate this problem.

Status of On-going Project:

Construction is expected to begin in June 2004 and to be completed in November 2005.

302.13C - Project Cost by Phase			
	Duration		Cost
Planning	From:	To:	
Design	From:	To:	
Construction	From: Jun-04	To: Nov-05 (18 Months)	1,683
Total			1,683

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition								-
Site Improvement								-
Construction			50	980	500			1,530
Contingency			5	98	50			153
Other								-
Total Project Costs	-	-	55	1,078	550	-	-	1,683

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund			55	1,078	550			1,683
State Aquafund Grants								-
Total Financing	-	-	55	1,078	550	-	-	1,683

* Cash Flow Basis in Thousands (000's)

Contract: 302.14C

Phase I CSO Facilities - Tunnel Pump Station Fitout and Startup

Project Manager: Richard Bernier

Description:

Contract 302.14C includes construction necessary to complete the tunnel pump station. This includes installation of pumps, piping and all other necessary mechanical equipment into the tunnel pump station chamber, which will be excavated under Contract 302.06. Also included in this contract is the installation of a screen at shaft S-1, the tunnel pump station above ground building force main, and screening building. The instrumentation and controls for all the Phase I facilities and startup of the facilities will also be done under this contract. The pump station will be located near Ernest and Ellis Streets.

Reason for Project/Benefits:

This project is a result of a federal mandate requiring clean up of approximately 70 combined sewer overflows (CSO's) which contribute to the degradation of the Narragansett Bay. During periods of heavy rain, the flow through the combined portions of the NBC's collection system frequently exceeds the capacity of the system. As a result, untreated sewage and stormwater mixture enters rivers and Narragansett Bay. These overflows have been a continual source of pollution in the Upper Bay often requiring RIDEM to close parts of the Bay to shellfishing. This CSO Abatement Project would mitigate this problem.

Status of On-going Project:

Construction is expected to begin in February 2005 and to be completed in November 2007.

302.14C - Project Cost by Phase			
Planning Design Construction	From:	To:	Duration (33 Months)
	From:	To:	
	From:	To:	
	Feb-05	Nov-07	
Total			33,660

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition								-
Site Improvement								-
Construction				1,500	11,100	10,000	8,000	30,600
Contingency				150	1,110	1,000	800	3,060
Other								-
Total Project Costs	-	-	-	1,650	12,210	11,000	8,800	33,660

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund				1,650	12,210	11,000	8,800	33,660
State Aquafund Grants								-
Total Financing	-	-	-	1,650	12,210	11,000	8,800	33,660

* Cash Flow Basis in Thousands (000's)

Contract: 302.15C

Phase I CSO Facilities - Overflows 006/007

Project Manager: Richard Bernier

Description:

Contract 302.15C is for the construction of one (1) dropshaft to the tunnel, associated gate and screening structures, diversion chambers and consolidation piping.

Reason for Project/Benefits:

This project is a result of a federal mandate requiring clean up of approximately 70 combined sewer overflows (CSO's) which contribute to the degradation of the Narragansett Bay. During periods of heavy rain, the flow through the combined portions of the NBC's collection system frequently exceeds the capacity of the system. As a result, untreated sewage and stormwater mixture enters rivers and Narragansett Bay. These overflows have been a continual source of pollution in the Upper Bay often requiring RIDEM to close parts of the Bay to shellfishing. This CSO Abatement Project would mitigate this problem.

Status of On-going Project:

Construction is expected to begin in November 2002 and to be completed in February 2004.

302.15C - Project Cost by Phase			
Planning Design Construction	From:	To:	Duration (15 Months)
	From:	To:	
	From:	To:	
	Nov-02	Feb-04	
Total			9,847

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition		700						700
Site Improvement								-
Construction		3,362	4,954					8,316
Contingency		336	495					831
Other								-
Total Project Costs	-	4,398	5,449	-	-	-	-	9,847

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds		700						700
State Revolving Fund		3,698	5,449					9,147
State Aquafund Grants								-
Total Financing	-	4,398	5,449	-	-	-	-	9,847

* Cash Flow Basis in Thousands (000's)

Contract: 302.21.00
CSO Flow Monitoring
Project Manger: Teresa Cote

Description:

This project includes the installation and maintenance of flow meters at CSO outfalls to determine frequency and volume of CSO discharges.

Reason for Project/Benefits:

To obtain flow monitoring data for design of floatables control facilities and for design of Phase II and Phase III CSO facilities.

Status of On-going Project:

Flow metering and monitoring was begun last year as a part of Phase I design project. It has been identified as a separate project in this year's CIP.

302.21.00 - Project Cost by Phase		
	Duration	Cost
Planning	From:	To:
Design	From:	To:
Construction	From: Jul-02	To: Jun-07
		1,250
Total		1,250

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning		125	125	125	125	125		625
A&E/Professional		125	125	125	125	125		625
Land Acquisition								-
Site Improvement								-
Construction								-
Contingency								-
Other								-
Total Project Costs	-	250	250	250	250	250	-	1,250

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund		250	250	250	250	250		1,250
State Aquafund Grants								-
Total Financing	-	250	250	250	250	250	-	1,250

* Cash Flow Basis in Thousands (000's)

Contract: 302.22P

Stormwater Attenuation Pilot Study

Project Manager: Thomas Brueckner

Description:

Several participants in the stakeholder process for the CSO project suggest that one way to reduce combined sewer overflow volumes and therefore the cost of CSO facilities for Phases II and III would be by reducing the amount of runoff reaching the combined sewers. A stormwater attenuation study was completed by NBC in 2000 which recommended that a pilot study be conducted to determine the effectiveness of disconnecting downspouts from combined sewers in a residential area. This project would implement the downspout disconnection pilot study.

Reason for Project/Benefits:

To determine if disconnection of downspouts from residencies in a combined sewers area can substantially reduce combined sewer overflows, and therefore result in a reduction of capital expenditures for future phases of the CSO program.

Status of On-going Project:

In evaluation and design phase.

302.22P - Project Cost by Phase				
	Duration			Cost
Planning	From:	To:		
Design	From: Oct-02	To: Jun-03	(8 months)	100
Construction	From: Jul-03	To: Jun-04	(11 months)	300
Total				400

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning		100						100
A&E/Professional			300					300
Land Acquisition								-
Site Improvement								-
Construction								-
Contingency								-
Other								-
Total Project Costs	-	100	300	-	-	-	-	400

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund		100	300					400
State Aquafund Grants								-
Total Financing	-	100	300	-	-	-	-	400

* Cash Flow Basis in Thousands (000's)

Contract: 304.00.00

Evaluation and Cleaning of CSO Interceptors

Project Manager: Meg Goulet

Description:

This project involves TV inspection of all interceptor sewers in the NBC's service area over the next ten years to determine their condition and to develop solution to correct any problems which may be identified. Based on inspections done to date, the interceptors primarily need to have accumulated grit removed.

Reason for Project/Benefits:

Improve the carrying capacity of the sewers and reduce CSO discharge volumes.

Status of On-going Project:

Implementation.

304.00.00 - Project Cost by Phase			
	Duration		Cost
Planning	From:	To:	
Design	From:	To:	
Construction	From: Ongoing	To: Ongoing	6,154
Total			6,154

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional								-
Land Acquisition								-
Site Improvement								-
Construction								-
Contingency								-
Other	154	1,000	1,000	1,000	1,000	1,000	1,000	6,154
Total Project Costs	154	1,000	1,000	1,000	1,000	1,000	1,000	6,154

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund	154	1,000	1,000	1,000	1,000	1,000	1,000	6,154
State Aquafund Grants								-
Total Financing	154	1,000	1,000	1,000	1,000	1,000	1,000	6,154

* Cash Flow Basis in Thousands (000's)

Contract: 304.07D

Concord Street Sewer Repair

Project Manager: Thomas Grala

Description:

As a part of the interceptor cleaning and inspection program, NBC found the Concord Street interceptor to be severely damaged and in need of immediate repair/replacement. This project includes the evaluation of alternatives for the repair, design of the selected alternative, and construction.

Reason for Project/Benefits:

Sewer is in extremely poor condition and needs to be repaired/replaced in order to prevent failure of the sewer.

Status of On-going Project:

In evaluation and design phase.

304.07D - Project Cost by Phase				
	Duration			Cost
Planning	From:	To:		
Design	From: Feb-02	To: Oct-02	(8 months)	100
Construction	From: Mar-03	To: Sep-03	(6 months)	525
Total				625

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional	50	50						100
Land Acquisition								-
Site Improvement								-
Construction		225	300					525
Contingency								-
Other								-
Total Project Costs	50	275	300	-	-	-	-	625

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund	50	275	300					625
State Aquafund Grants								-
Total Financing	50	275	300	-	-	-	-	625

* Cash Flow Basis in Thousands (000's)

Contract: 304.09D

Burrington Street and Grotto Brook Sewer Repairs

Project Manager: Thomas Grala

Description:

As a part of the interceptor cleaning and inspection program, NBC found the Burrington Street interceptor and the Grotto Brook system to be damaged and in need of repair/replacement. This project is for the planning, design and construction of repairs/replacement.

Reason for Project/Benefits:

The Burrington St. sewer needs to be repaired/replaced to avoid failure. The Grotto Brook system needs repair/replacement because of damage to the pipe, infiltration problems and difficulty in conducting maintenance due to inaccessibility in a wetland.

Status of On-going Project:

Planning phase to be initiated in FY 2003.

304.09D - Project Cost by Phase				
	Duration			Cost
Planning	From: Jul-02	To: Oct-02	(3 months)	75
Design	From: Nov-02	To: Feb-03	(3 months)	100
Construction	From: Jul-03	To: Jan-04	(6 months)	1,100
Total				1,275

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional		175						175
Land Acquisition								-
Site Improvement								-
Construction			1,000					1,000
Contingency			100					100
Other								-
Total Project Costs	-	175	1,100	-	-	-	-	1,275

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund		175	1,100					1,275
State Aquafund Grants								-
Total Financing	-	175	1,100	-	-	-	-	1,275

* Cash Flow Basis in Thousands (000's)

Contract: 304.10P

Sewer System Infiltration/Inflow Study

Project Manager: Thomas Brueckner

Description:

The sewers in the Field's Point service area are subject to high infiltration/inflow. In order to determine if this flow is excessive, an intensive sewer metering program needs to be conducted to identify the amount and location of these flows. This project will entail installing flow meters at locations throughout the sewer system and analyzing the data to determine if these flows should be reduced.

Reason for Project/Benefits:

To determine if excessive flows are causing surcharging of the sewer and hydraulic loading of the Field's Point Wastewater Treatment Facility.

Status of On-going Project:

To begin in FY 2003.

304.10P - Project Cost by Phase			
Planning Design Construction	From: Jan-03 From: From:	To: Jun-06 To: To:	Duration (42 months) Cost 3,500
Total			3,500

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning								-
A&E/Professional		500	1,000	1,000	1,000			3,500
Land Acquisition								-
Site Improvement								-
Construction								-
Contingency								-
Other								-
Total Project Costs	-	500	1,000	1,000	1,000	-	-	3,500

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund		500	1,000	1,000	1,000			3,500
State Aquafund Grants								-
Total Financing	-	500	1,000	1,000	1,000	-	-	3,500

* Cash Flow Basis in Thousands (000's)

Contract: 304.11C

Floatables Control Facilities

Project Manager: Thomas Brueckner

Description:

As part of the nine minimum controls required under EPA's CSO Control Policy, floatables control is to be provided at all CSO overflows. RIDEM will require that all CSO overflows to be addressed in Phase II and III of the CSO program must be provided with floatables control in the interim. NBC will complete the evaluation of a trash net floatables control facility by the end of December 2002 and will submit a plan for addressing floatables control for Phase II and III overflows to RIDEM in early 2003. Design and construction of floatables control facilities at approximately 40 outfalls will follow.

Reason for Project/Benefits:

To eliminate the discharge of floatables from CSO overflows that are included in Phase II and Phase III of the CSO project.

Status of On-going Project:

Demonstration pilot ongoing. Planning and design to begin in FY 2003.

304.11C - Project Cost by Phase							
Planning Design Construction	Duration						Cost
	From:	Dec-02	To:	Feb-03	(2 months)		25
	From:	Jul-03	To:	Jul-07	(48 months)		1,000
	From:	Jan-04	To:	Jun-08	(54 months)		16,500
Total							17,525

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning		25						25
A&E/Professional			250	250	250	250		1,000
Land Acquisition								-
Site Improvement								-
Construction		1,700	4,000	4,000	4,000	1,300		15,000
Contingency		170	400	400	400	130		1,500
Other								-
Total Project Costs	-	1,895	4,650	4,650	4,650	1,680	-	17,525

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund		1,895	4,650	4,650	4,650	1,680		17,525
State Aquafund Grants								-
Total Financing	-	1,895	4,650	4,650	4,650	1,680	-	17,525

* Cash Flow Basis in Thousands (000's)

Contract: 704.00D

Investigation and Rehabilitation of the Washington Hwy and Omega Pump Stations

Project Manager: Thomas Grala

Description:

The Washington Highway and Omega Pump Stations in the Bucklin Point service area are older stations nearing the end of their design life. A study of these stations has been completed. It is recommended that the Washington Highway Pump Station be replaced and that improvements be made to the Omega Pump Station.

Reason for Project/Benefits:

To maintain pump stations in good operating condition and to meet current safety and design standards.

Status of On-going Project:

Planning is completed. Design began in January 2002.

704.00D - Project Cost by Phase				
	Duration			Cost
Planning	From: Feb-00	To: Apr-01	(14 Months)	91
Design	From: Jan-02	To: Jan-03	(12 Months)	576
Construction	From: Jun-03	To: Nov-05	(30 Months)	5,764
Total				6,431

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning	91							91
A&E/Professional	50	380						430
Land Acquisition		50						50
Site Improvement								-
Construction			2,100	2,100	1,040			5,240
Contingency		40	210	210	104			564
Other		56						56
Total Project Costs	141	526	2,310	2,310	1,144	-	-	6,431

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds		50						50
State Revolving Fund	141	476	2,310	2,310	1,144			6,381
State Aquafund Grants								-
Total Financing	141	526	2,310	2,310	1,144	-	-	6,431

* Cash Flow Basis in Thousands (000's)

Contract: 903.01.00

Geographic Information System Implementation (GIS)

Project Manager: Thomas Grala

Description:

The NBC has completed a study to implement a GIS program. This GIS would allow the NBC to geographically relate and maintain databases on its sewer system and other facilities. The project includes data conversion, data development, and acquisition of additional hardware and software. The implementation of GIS includes potential functions for the Interceptor Maintenance and Construction, Engineering, Pretreatment, and Customer Service sections of the NBC. The first part of the GIS program will be to provide coverage of NBC interceptors throughout the district.

Reason for Project/Benefits:

Plans and records need to be updated to reflect actual locations/sizes of facilities. This will enhance NBC's existing records, assist with planning, enhance facilities management and allow NBC to more easily comply with new reporting procedures required by the EPA.

Status of On-going Project:

Beginning implementation by development of the interceptor system coverage.

903.01.00 - Project Cost by Phase				
	Duration			Cost
Planning	From: Oct-95	To: May-96	(8 Months)	89
Design	From:	To:		
Construction	From: Mar-01	To: Dec-04	(45 Months)	783
Total				872

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning	89							89
A&E/Professional	212	140	150					502
Land Acquisition								-
Site Improvement								-
Construction								-
Contingency	30	14	10					24
Other	77	75	75					150
Total Project Costs	408	229	235	-	-	-	-	872

Projected Financing								
Financing	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
State Grant								-
Federal Grant								-
Bay Bonds								-
State Revolving Fund	408	229	235					872
State Aquafund Grants								-
Total Financing	408	229	235	-	-	-	-	872

* Cash Flow Basis in Thousands (000's)

Appendix

Description	Debt Type		Fiscal Year 2003	Fiscal Year 2004	Fiscal Year 2005	Fiscal Year 2006	Fiscal Year 2007	Fiscal Year 2008
\$3M GOB - REFUNDED \$270,000 (1988 Series A)	State/G.O.'s	Principal	15,000	-	-	-	-	-
		Interest	1,065	-	-	-	-	-
		Subtotal	16,065	-	-	-	-	-
\$14M GOB - REFUNDED \$967,781 (1992A Refunded)(Refunded 2002)	State/G.O.'s	Principal	160,000	110,000	110,000	-	-	-
		Interest	16,541	7,150	2,200	-	-	-
		Subtotal	176,541	117,150	112,200	-	-	-
\$14M GOB 1997 Refunding portion (1997 Refunded - \$134,500)	State/G.O.'s	Principal	1,300	66,500	66,700	-	-	-
		Interest	6,694	4,998	1,668	-	-	-
		Subtotal	7,994	71,498	68,368	-	-	-
6M GOB - REFUNDED - \$2,805,687.89 (1992A Refunding dated 1992)(Refunded 2002)	State/G.O.'s	Principal	255,000	175,000	170,000	480,000	475,000	-
		Interest	72,351	49,375	41,600	28,600	9,500	-
		Subtotal	327,351	224,375	211,600	508,600	484,500	-
6M GOB 1997 Refunding (1997 Refunding - \$802,300)	State/G.O.'s	Principal	2,100	104,600	104,600	297,300	293,700	-
		Interest	40,319	37,526	32,165	22,118	7,343	-
		Subtotal	42,419	142,126	136,765	319,418	301,043	-
21.55M GOB 1997 Refunding Portion (1997 Refunded - \$560,000)	State/G.O.'s	Principal	4,200	3,200	1,900	1,600	2,100	-
		Interest	10,923	10,744	10,613	10,525	10,433	10,380
		Subtotal	15,123	13,944	12,513	12,125	12,533	10,380
21.55M GOB - REFUNDED - \$2,040,904 (1996).	State/G.O.'s	Principal	287,659	286,688	288,285	289,570	280,283	280,765
		Interest	104,467	89,753	72,504	55,169	38,073	22,224
		Subtotal	392,126	376,441	360,789	344,739	318,356	302,989
5.5M GOB - REFUNDED - \$3,500,000 (1980 SERIES D)	State/G.O.'s	Principal	175,000	175,000	175,000	175,000	175,000	175,000
		Interest	78,925	65,975	52,850	39,725	26,600	13,300
		Subtotal	253,925	240,975	227,850	214,725	201,600	188,300
CEDE & CO. \$7.731M (BVDC) (BVDC 1992A Refunding and non-Refunded) (Refunded 2002)	State/G.O.'s	Principal	695,000	480,000	470,000	1,325,000	1,310,000	-
		Interest	199,256	136,200	114,800	78,900	26,200	-
		Subtotal	894,256	616,200	584,800	1,403,900	1,336,200	-
\$7.731M 1997 Refunding Portion (1997 Refunded - \$2,211,700)	State/G.O.'s	Principal	5,700	288,600	288,600	819,300	809,500	-
		Interest	111,150	103,446	88,655	60,958	20,238	-
		Subtotal	116,850	392,046	377,255	880,258	829,738	-
1993 REFUNDING BOND \$3,080,000 (BVDC) (\$4.85M) (BVDC 1993 Refunding)	State/G.O.'s	Principal	430,000	280,000	270,000	-	-	-
		Interest	53,690	32,620	18,900	-	-	-
		Subtotal	483,690	312,620	288,900	-	-	-
\$900,000 Part A 1997 Refunding Portion (1997 Refunded - \$103,800)	State/G.O.'s	Principal	800	600	400	300	400	-
		Interest	2,025	1,991	1,965	1,948	1,930	1,920
		Subtotal	2,825	2,591	2,365	2,248	2,330	1,920
1996 REFUNDING BOND \$377,753 (\$900,000 Part B) (BVDC) (GOB Refunding 1996- BVDC)	State/G.O.'s	Principal	53,156	52,977	53,272	53,509	52,012	52,101
		Interest	19,341	16,622	13,434	10,231	7,065	4,124
		Subtotal	72,497	69,599	66,706	63,740	59,077	56,225
FLEET \$100,000 (BVDC) (BVDC 1971 Series D)	State/G.O.'s	Principal	5,000	5,000	-	-	-	-
		Interest	637	380	250	250	250	250
		Subtotal	5,637	5,380	250	250	250	250
FLEET \$100,000 (BVDC) Partial Refunding (BVDC 1971 Series D 9/98 Ref.)	State/G.O.'s	Principal	-	-	-	-	5,000	10,000
		Interest	1,519	1,519	1,519	1,519	1,394	1,019
		Subtotal	1,519	1,519	1,519	1,519	6,394	11,019

Description	Debt Type		Fiscal Year 2003	Fiscal Year 2004	Fiscal Year 2005	Fiscal Year 2006	Fiscal Year 2007	Fiscal Year 2008
FLEET \$100,000 (BVDC) Partial Refunding (BVDC 1971 Series D 4/01 Ref.)	State/G.O.'s	Principal	-	-	5,000	-	-	-
		Interest	525	525	400	275	275	275
		Subtotal	525	525	5,400	275	275	275
CAPITAL APPRECIATION BONDS (BVDC 1996)		Principal	-	-	-	16,751	12,288	8,888
		Interest	-	-	-	333,249	312,712	281,112
		Subtotal	-	-	-	350,000	325,000	290,000
FLEET \$3,315,000 (BVDC 1986 Series F)	State/G.O.'s	Principal	150,000	160,000	-	-	-	-
		Interest	26,145	18,160	14,000	14,000	14,000	14,000
		Subtotal	176,145	178,160	14,000	14,000	14,000	14,000
FLEET \$3,315,000 - Partial Refunding (\$1.3M) 9/98 (BVDC 1986 Series F)	State/G.O.'s	Principal	5,000	5,000	5,000	-	90,000	250,000
		Interest	49,128	48,935	48,738	48,638	46,388	37,888
		Subtotal	54,128	53,935	53,738	48,638	136,388	287,888
FLEET \$3,315,000 - Partial Refunding (\$305K) 9/98 (BVDC 1986 Series F)	State/G.O.'s	Principal	-	-	-	-	95,000	140,000
		Interest	12,288	12,288	12,288	12,288	10,388	5,688
		Subtotal	12,288	12,288	12,288	12,288	105,388	145,688
FLEET \$3,315,000 - Partial Refunding (\$415K) (BVDC 1986 Series F) 4/01 Ref.	State/G.O.'s	Principal	-	-	165,000	-	-	-
		Interest	22,000	22,000	17,875	13,750	13,750	13,750
		Subtotal	22,000	22,000	182,875	13,750	13,750	13,750
SRF - NO. PROV. \$2.647M	SRF	Principal	131,890	136,803	141,899	147,184	152,667	158,354
		Interest	55,782	50,777	45,586	40,202	34,617	28,825
		Subtotal	187,671	187,580	187,485	187,387	187,284	187,179
SRF - WP/RA - \$3.694	SRF	Principal	171,886	177,961	184,252	190,765	197,508	204,489
		Interest	85,427	79,275	72,905	66,311	59,483	52,413
		Subtotal	257,313	257,236	257,157	257,076	256,991	256,902
SRF - BUTLER - \$1.662M	SRF	Principal	79,758	82,761	85,876	89,109	92,463	95,944
		Interest	38,500	35,441	32,266	28,973	25,555	22,009
		Subtotal	118,258	118,201	118,143	118,082	118,019	117,953
SRF POOL LOAN I - \$14.781M	SRF	Principal	637,000	660,500	685,000	710,250	736,500	763,500
		Interest	406,856	383,052	358,368	332,771	306,229	278,710
		Subtotal	1,043,856	1,043,552	1,043,368	1,043,021	1,042,729	1,042,210
SRF POOL LOAN II - \$17.279M	SRF	Principal	747,306	773,546	800,708	828,824	857,927	888,052
		Interest	448,838	422,270	394,769	366,303	336,837	306,337
		Subtotal	1,196,144	1,195,816	1,195,477	1,195,127	1,194,764	1,194,389
SRF POOL LOAN III - \$8.150M	SRF	Principal	304,539	315,695	327,250	339,246	351,673	364,555
		Interest	270,459	260,156	248,439	235,293	222,702	209,655
		Subtotal	574,998	575,851	575,689	574,539	574,375	574,210
SRF POOL LOAN IV - \$23.955M	SRF	Principal	1,000	1,000	1,000	1,000	1,000	2,155,000
		Interest	846,073	846,038	846,002	845,967	845,932	807,857
		Subtotal	847,073	847,038	847,002	846,967	846,932	2,962,857
SRF POOL LOAN V - \$57M	SRF	Principal	1,305,000	2,305,000	2,380,000	1,250,000	1,500,000	2,250,000
		Interest	1,688,191	1,729,543	1,655,262	1,597,708	1,554,107	1,494,651
		Subtotal	2,993,191	4,034,543	4,035,262	2,847,708	3,054,107	3,744,651
	Totals	Principal	5,623,294	6,646,431	6,779,742	7,014,708	7,490,022	7,796,648
		Interest	4,669,111	4,466,757	4,200,021	4,245,668	3,931,999	3,606,385
		Total Existing	10,292,405	11,113,187	10,979,763	11,260,376	11,422,020	11,403,033
Estimated Increase in Debt Service to Fund Current Capital Program	Principal & Interest		1,079,597	6,973,449	12,091,097	17,895,152	21,464,878	23,580,882
	Grand Total		11,372,002	18,086,636	23,070,860	29,155,528	32,886,898	34,983,915

2001 RHODE ISLAND RESIDENTIAL SEWER USER CHARGES

MUNICIPALITY / WASTEWATER TREATMENT FACILITY	ANNUAL SEWER USER FEE	BASED ON 200 GPD or 97.6 HCF
BARRINGTON	\$2.15/hcf	\$209.84
BRISTOL*	Flat Rate \$202.00	\$202.00
BURRILLVILLE*	Flat Rate \$240.00	\$240.00
CRANSTON	Flat Rate \$267.75	\$267.75
EAST GREENWICH	\$2.08/hcf for 85% of Water Usage	\$172.56
EAST PROVIDENCE	\$10.00 Plus \$1.90/hcf over 35 hcf	\$128.94
JAMESTOWN	\$4.09/hcf	\$399.18
MIDDLETOWN	\$3.98/hcf	\$388.45
NARRAGANSETT	Flat Rate \$345.00 Plus \$2.75/hcf for 101-200 hcf; \$3.25/hcf for 201-300 hcf; Over 301 hcf - \$2.75/hcf	\$345.00
NBC SERVICE AREA**	\$68.24 Plus \$1.40/hcf	\$204.67
NEWPORT	\$3.68/hcf	\$359.17
NORTH SMITHFIELD*	Flat Rate \$200.00	\$200.00
SMITHFIELD*	Flat Rate \$200.00 plus \$10 for Industrial Pretreatment Program	\$210.00
SOUTH KINGSTOWN*	Flat Rate: \$147 Plus \$1.83/hcf over 100 hcf	\$147.00
WARREN	Ad-Valorem Taxes	
WARWICK*	\$45.42 Plus \$1.91/hcf For 85% of Water Usage	\$203.87
WEST WARWICK	\$73.27, Plus \$2.83/hcf For 80% of Water Usage	\$294.24
WESTERLY*	Flat Rate \$123.00	\$123.00
WOONSOCKET	Flat Rate \$204.00	\$204.00
AVERAGE	EXISTING RATE:	\$238.87

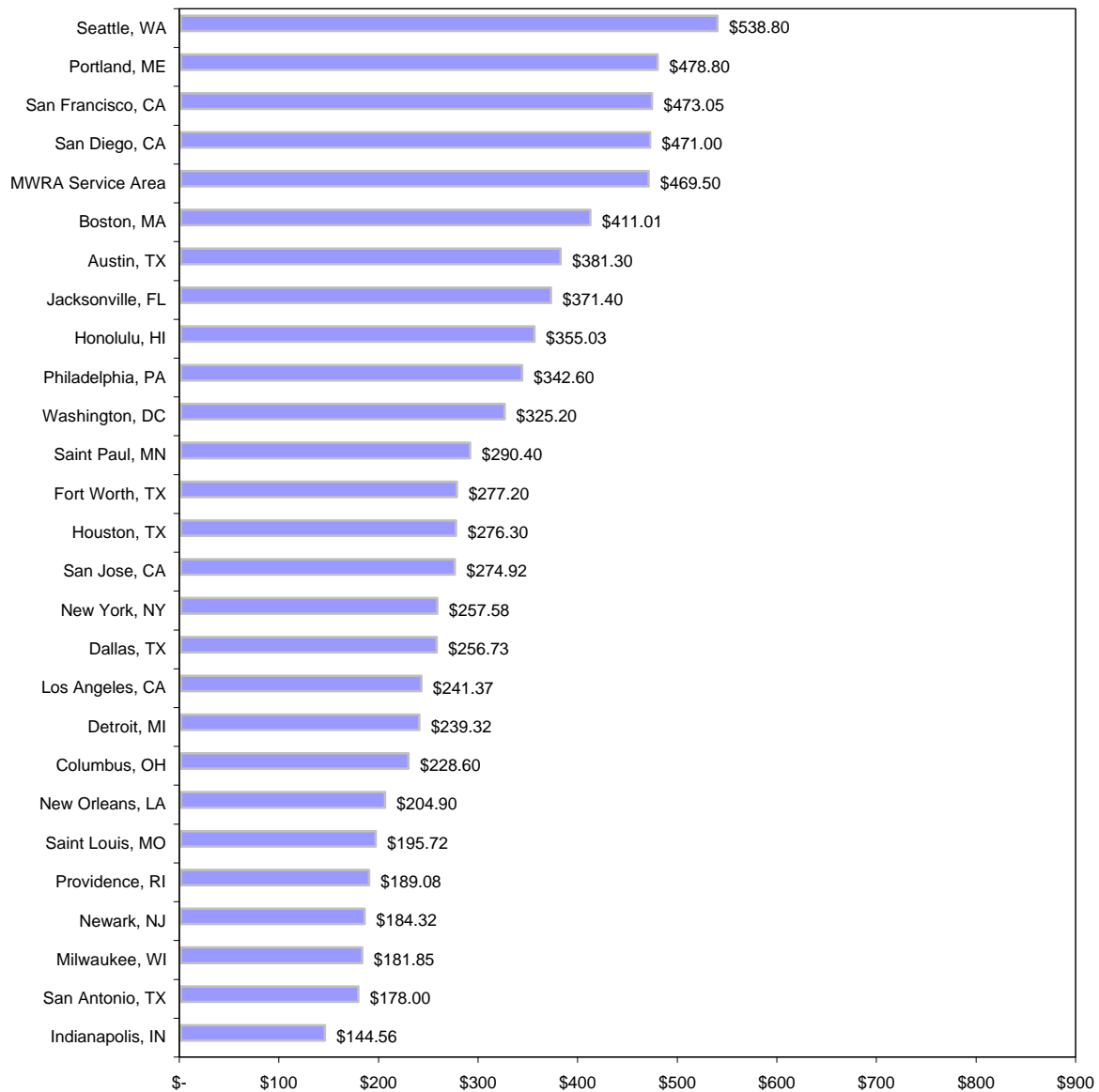
* Debt Service for capital improvements either not included in user charge or only partially funded by user charge. Other sources of debt service funding include sewer assessments, ad-valorem taxes, bond issues and/or general fund.

** Rates include transportation and treatment costs only. Additional fees associated with the operation and maintenance of all municipally-owned collection sewer lines are borne by the users through local taxes.

Note: Survey results from the above cities/towns indicate that the estimated average water consumed by a single family home is 194 gpd (gallons per day).

A survey shown below compares annual residential sewer charges for major U.S. Cities conducted by the Massachusetts Water Resource Authority (MWRA) in 2001 showed that Providence ranked 5th lowest in the country.

Annual Residential Sewer Charges for Major U.S. Cities



Source: 2001 MWRA Water & Sewer Retail Rate Survey

Compliance Reporting per Docket # 3162

Capital Improvement Project Status Report	Report submitted September 5, 2002. The NBC is currently awaiting the PUC's suggested format in order to resubmit this report.
Restricted Account Report	Report submitted October 31, 2002
Docket 3432 - Stormwater Rate Study	The NBC submitted pre-filed testimony on November 1, 2002. This testimony was in response to questions posed at a pre-hearing conference held on September 6, 2002. Hearings on this subject are scheduled for January 14, 2003.
Independent Oversight of CSO Project (Special Master)	The NBC has restricted the appropriate funds.

**DIRECT TESTIMONY OF
WALTER E. EDGE Jr. MBA CPA
CONSULTING DEPARTMENT DIRECTOR
BACON & EDGE p.c.**

**for
THE NARRAGANSETT BAY COMMISSION**

DOCKET # _____

NOVEMBER 2002

1 **Q. Good morning Mr. Edge. Would you please give your name and business**
2 **address for the record?**

3 A. Certainly, my full name is Walter Edward Edge Jr. MBA CPA. I work for the
4 accounting/consulting firm of Bacon & Edge p.c. at One Worthington Road, Cranston
5 R. I. 02920. Bacon & Edge (B&E) is a full service accounting firm that specializes in
6 municipal and utility accounting/consulting.

7
8 **Q. Are you the same Walter E. Edge Jr. who has testified as an expert accounting**
9 **and rate witness in previous rate filings for Narragansett Bay Commission (NBC)?**

10 A. Yes. I have provided expert accounting and rate testimony for NBC on numerous
11 occasions. In addition, I have provided similar services for other regulated clients such
12 as Interstate Navigation Company, Block Island Power Company, Providence Water
13 Supply Board, Pawtucket Water Supply Board, Newport Water, Prudence Ferry, and
14 Stone Bridge Fire District. In addition to the above testimony, I have provided expert
15 testimony for the intervention in PUC filings by Interstate Navigation, the Town of North
16 Smithfield and Osram Sylvania. Further, I have completed rate studies for non-regulated
17 utilities such as Warwick Water, Warwick Sewer, East Providence Water, Greenville
18 Water and Harrisville Fire District.

19
20 **Q. What is the purpose of your testimony in this docket?**

21 A. NBC hired B&E to develop a normalized test year, FYE June 30, 2002 and a rate
22 year, FYE June 30, 2004. B&E was engaged to prepare expert testimony in support of
23 both the test year and the rate year, which included all the schedules and exhibits required
24 by the rules and regulations of the Rhode Island Public Utilities Commission (PUC).
25 Also, B&E was asked to prepare and present any appropriate rate design testimony. In
26 addition, B&E will review the testimony of others, assist with cross-examination and help
27 develop filing strategies. Lastly, B&E will assist legal counsel with the preparation of
28 appropriate briefs.

1 **Q. Before starting your explanation of the test year, rate year and rate design,**
2 **would you please give the Division and the PUC an update as to the status of rate**
3 **issues raised in the last full rate filing?**

4 A. Certainly. The last full rate filing (Docket # 3162) was filed on June 29, 2000 for
5 implementation in the rate year, calendar year 2001. The major issues were as follows:
6

7 **1. The Projection for Industrial Revenues:**
8

9 The Division took exception with the NBC estimate of a \$330,000 reduction of
10 industrial revenues that resulted from the loss of three large customers. The
11 Division proposed a \$152,121 increase in the NBC projected industrial revenue.
12 NBC accepted the Division's adjustment. The resulting projected industrial
13 revenue balance for the rate year CY 2001 was \$1,937,705. The actual revenue
14 for FYE June 30, 2002 (the first full fiscal year of the increase) was \$1,646,572 so
15 it appears that the final agreed upon position was overstated by almost \$300,000.
16 This continued reduction in the industrial revenue will be addressed in this
17 testimony.
18

19 **2. Other Revenues:**
20

21 NBC agreed to the Division's adjustments for other revenues and the results in the
22 first full year of the new rates showed that the agreed upon balances were
23 reasonable accurate. Nevertheless this area will be reviewed again in detail as
24 part of this testimony.
25

26 **3. Amortization of Y2K Expense:**
27

28 This was a onetime issue and will not be an issue in this docket.
29
30
31

1 4. **Miscellaneous Rate Year Adjustments:**

2
3 There were a few minor adjustments (increases and decreases) to rate year
4 expense accounts that were agreed to by the parties. I expect that there will be a
5 few similar adjustments this time due primarily to the passage of time from when
6 I complete my testimony and when the Division prepares its testimony.

7
8 5. **Bad Debt Expense:**

9
10 The PUC found in Docket #2216 that “NBC is entitled to some fixed level of bad
11 debt protection”. In that docket the PUC provided an allowance of one half of one
12 percent of the approved cost of service or \$160,000. In the last docket NBC
13 requested that the rate year level of bad debt expenditure be set at one half of one
14 percent of the requested cost of service. The Division adjusted the bad debt
15 allowance to reflect the audited bad debt expense ratio calculated from the
16 financial statements. NBC accepted the adjustment and will use the Division
17 method again for this filing.

18
19 6. **Calculation of Debt Service Costs:**

20
21 By far the largest issue in the last docket (and will be in this docket) was the
22 method of calculating debt service costs. Because the NBC is in the process of
23 constructing two significant capital projects, Phase I of the Combined Sewer
24 Overflow (CSO) abatement project and Contract 807, debt service costs have been
25 increasing substantially each year. In previous dockets (before Docket #3162)
26 NBC had been allowed to average three years of debt service costs to avoid
27 having to file rate increases each year. In Docket # 3162, NBC continued the
28 approach and filed a three-year average for debt service costs.

1 The Division proposed that the debt service cost be calculated by using a
2 two-year average instead of the previously approved three-year average. The
3 Division's approach reduced the increase in revenue requirement by \$2,490,397 or
4 about 25%. In the settlement, NBC agreed with the adjustment.

5
6 It is important to note however that the Division stated at the time that their
7 adjustment would probably result in NBC having to file for an abbreviated rate
8 filing to recover the increase in debt service costs for FYE 2003. In December of
9 2001, NBC did in fact file an abbreviated rate filing for the increase in debt
10 service related costs in the amount of \$8,834,420. The PUC approved the filing
11 almost in its entirety.

12
13 NBC will include the increase in revenue available from the abbreviated rate
14 filing as a rate year adjustment in this docket. Further, NBC will provide two
15 alternative methods for the treatment of debt service costs for this docket.

16
17 **Q. Does that conclude the cost of service issues raised in the last docket?**

18 A. Yes.

19
20 **Q. Mr. Edge, were any rate design issues raised in the last docket?**

21 A. Yes, however in this docket NBC is not proposing any substantial rate design issues.
22 In the previous filing NBC requested the implementation of the final phase-in of the "one
23 district/one rate" proposal approved in a previous docket and that the remainder of the
24 rate increase to be applied on an across-the-board basis. The Division agreed with the
25 NBC rate design proposal.

26
27 In an attempt to provide the PUC with rate design options, NBC also proposed in the last
28 docket the option of converting NBC's current "usage based" rate design to a flat fee
29 (fixed base) rate design. The Division was not in favor of the change in rate design and
30 NBC did not pursue the issue further.

31

1 **Q. What are the major issues or reasons for this rate request?**

2 A. By far the largest and most significant issue in this docket continues to be the debt
3 service costs associated with funding the NBC's Capital Improvement Program (CIP).

4 The most substantial issues in the CIP are the CSO abatement project and Contract 807.

5
6 As was covered in the last docket, NBC is under a federal mandate that requires it to
7 address the raw discharge that flows into the Narragansett Bay during certain rainfall
8 events. NBC has worked diligently over the last several years to review the alternatives
9 available to address this situation and to start the project.

10
11 A full explanation of the CSO project, the current projected project costs and the
12 proposed schedule for the project is explained further in the testimony of others.
13 However, included in my cost of service schedules is the debt service costs related to a
14 portion of the first phase of the CSO project as reflected in NBC's 2004-2008 capital
15 program. Please note that in the last filing the construction cost of the first phase of the
16 CSO project was estimated at approximately \$299,000,000. Since then, additional
17 contracts have been put out to bid and revisions to the cost estimates have been made.
18 The cost estimates for the CSO construction contracts are addressed in the testimony of
19 Joseph Pratt.

20
21 The second general area that has to be addressed is operating costs. This issue was
22 discussed briefly during the abbreviated filing because the PUC Commissioners were
23 concerned that NBC should have requested operating expense increases in that docket.
24 NBC explained that it intended to file a full rate case within the year and the operating
25 expense items would be addressed at that time. This is that full rate case filing.

26
27 Nevertheless, since the calendar year 2001 there have been increases in salaries and
28 wages, fringe benefits, and changes (increases and decreases) in the cost of operating and
29 maintaining NBC's treatment facilities. These increases and decreases will be addressed
30 in this testimony.

1 **Q. How much of a rate increase is NBC requesting in this docket?**

2 A. NBC is requesting additional revenue in the amount of \$13,826,248 that will
3 increase total rate year revenue to \$58,277,461. This represents a rate increase of 31.1%.
4 This said, NBC is requesting that the PUC consider a new alternative form of financing
5 for NBC that could reduce the required rate increase from 31.1% to as low as 9.0%.
6

7 **Q. Why did NBC file for a 31.1% increase if it only needs an increase of 9%?**

8 A. NBC is aware of the PUC regulations, specifically the notice requirements. The new
9 financing approach (Variable Rate Bonds in Tax-Exempt Commercial Paper (TECP
10 mode)) that NBC is presenting for the first time in this docket is different from previous
11 approaches approved by the PUC and may not be acceptable to the PUC. Further NBC is
12 proposing two alternatives and NBC does not know which approach the PUC will prefer.
13

14 If NBC filed for a rate increase using Alternative 2 (a 9% increase the first year and
15 20.72% in the second year a total for the two years of 29.72%) and the PUC preferred
16 Alternative 1 (a 21.62% increase for two years) or simply rejected the new financing
17 approach then NBC would be faced with not having requested a revenue amount adequate
18 to cover the cost of financing its capital projects. NBC would have had to re-file using
19 the approach previously approved by the PUC (two year averaging with market bonds)
20 that results in a 31.1% increase. NBC believes that the approach selected eliminates the
21 possibility of having to re-file. Nevertheless, NBC is hopeful that one of the new
22 financing alternatives will be selected by the PUC.
23
24
25

26 **Q. Will all rates increase by 31.1% if the filing is approved as filed?**

27 A. No, not all revenue accounts are impacted by the rate increase, therefore the effective
28 rate increase is 31.6%. See schedule WEE-33.
29
30
31

1 **Q. Does that conclude your overview?**

2 A. Yes. However, it is important to point out that NBC has not filed a full rate increase
3 since 2000 (calendar 2001 rate year) and NBC would have preferred to avoid filing, even
4 at this time, but it was impossible given the significant costs related to the mandated CSO
5 abatement project and increases in certain operating costs. NBC believes that it has
6 primary responsible for keeping rates as low as possible and to that end has filed two new
7 financing options that the PUC can choose from, which will significantly decrease the
8 rate increase required in the first year of a six year financing program.

TEST YEAR (JULY 1, 2001- JUNE 30, 2002)

Q. Mr. Edge, did B&E audit the test year?

A. No, B&E was not the auditor of the 2002 financial statements. However, as part of my preparations for this filing I reviewed the trial balance of accounts of NBC in order to obtain a better understanding of the detail transactions included in the revenues and expenses. Whenever necessary I requested detail analysis of accounts. My observations and findings made in cooperation with Ms. Foster, NBC's Controller, formed the basis for my normalized test year.

Q. How did you prepare the test year?

A. I started with the June 30, 2002 audited financial statements that were prepared using Generally Accepted Accounting Principal (GAAP). It was necessary for me to make certain adjustments to put the June statements into a ratemaking model. In addition to the rate model adjustments I made a number of normalizing adjustments as follows:

- The first adjustment is the elimination of a one time arbitrage rebate included in miscellaneous revenue that was on the NBC books for years and just recently it was determined that the liability does not exist.
- The second adjustment (a rate model adjustment) was made to add the cost of principal payments (\$4,326,500) on long-term debt paid during the test year. Because NBC is regulated on a cash basis, principal payments and capital related expenditures that are made with operating revenues have to be added to the test year expenditures.
- Next, I added (the second rate model adjustment) the capital items purchased in the test year with operating revenues (total amount \$1,151,216). Once again, this is done because NBC is regulated on a cash basis. For GAAP purposes these items were capitalized and subsequently depreciated. Since NBC is not allowed depreciation these items are included as cost in the year they are purchased.

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- The fourth adjustment (another rate model adjustment) was made to remove depreciation (\$5,699,783) and all but \$9,690 of the annual amortization expense (\$139,716) from the GAAP basis financial statements. The amortization left is for the Bucklin Point organization cost that was established a number of years ago by the Auditor General’s office. This adjustment for the most part offsets the effects of adjustments two and three above.

- The next adjustment was made to eliminate a one-time capital contribution (General Obligation (G.O.) Bonds) from the State of Rhode Island given to NBC to use for its capital projects in the amount of \$9,064,450. .

- The sixth adjustment was needed to eliminate a one-time bond issuance refunding cost rebate from the State of Rhode Island in the amount of \$28,881. This refinancing resulted in a reduction of debt service payments and therefore could be capitalized and amortized over the term of the new financing but the amount was considered too minor to capitalize.

- The next item I adjusted was miscellaneous income, in order to eliminate one-time payments for copies of bid specification revenue of \$22,300 and proceeds from a workers compensation audit of \$8,739 (total \$31,039). Although these items are relatively minor in amount, neither is expected in a normal year.

- Grant activity is the next adjustment. Grant revenue is related to grant mandated expenditures and is not available to pay for normal operations. With this adjustment 8 I have removed all of the grant revenues and grant expenses from the GAAP basis financial statements.

- Next a normalization adjustment was made to reduce insurance expense by \$27,655 for a pollution insurance premium paid in the test year that has a two-year

1 term 2002 and 2003. Only one year of expense is appropriate for a normalized
2 year.

3

4 ➤ The debt coverage allowance in the test year has been adjusted by \$1,801,118.
5 This amount will be updated by the rate year debt service calculations.

6

7 ➤ All other special services were reduced for the costs relating to the NBC's recent
8 move to its new corporate quarters. These costs totaling \$75,231 will not
9 reoccur.

10

11 ➤ In addition to the cost of the move NBC had a one time loss for old unusable,
12 unnecessary and obsolete equipment that was disposed of as a result of the move
13 in the amount of \$117,486.

14

15 ➤ Next, I normalized the rental-clothing account (reduced by \$17,045) for a one-
16 time cost of changing suppliers and some overlap between the two companies.

17

18 ➤ As in previous cases, I have eliminated Environmental Enforcement revenues
19 (\$5,060) and related expenses (\$15,950). These revenues and expenses are
20 legislatively mandated.

21

22 ➤ A substantial adjustment, \$357,888, was made to electric expense to eliminate
23 credits posted in the current year for the prior year expenses. This account will
24 be reviewed in detail for the rate year.

25

26 ➤ Next a very minor normalization adjustment was made to employee benefit health
27 insurance in the amount of \$6,293 to account for the increase in vision expense.
28 This account will be readjusted in the rate year.

29

➤ And lastly, a small adjustment was made to the telephone expense account and the central phone services account to reflect the change from CENTREX lines to ATT lines as a result of the move.

Q. Mr. Edge, you have made a number of relatively minor normalization adjustments. Why have you spent so much time and effort on the test year?

A. I believe that the test year is an important foundation on which you build the appropriate rate year. In fact I have left a great number of accounts in the rate year at the test year levels. Further, it was important given the NBC's move to new headquarters that we make every effort to eliminate non-recurring items. I believe that the test year as adjusted is a good foundation for the rate year.

Q. Mr. Edge, did you complete a schedule that shows the test year revenue by source that ties into the test year revenue schedule?

A. Yes, see Schedule WEE-2. This schedule will be used again later in my testimony for the revenue check for the rate year rates.

Q. Have you provided a historic revenue and expense schedule for the last four years?

A. Yes I have, see Schedule WEE-3. I believe that this schedule is helpful when projecting rate year levels of revenues and expenses.

Q. With the 17 adjustments noted above, do you believe that the amended test year on Schedule WEE-1 represents a normal level of revenue and expenses for NBC?

A. Yes, I do. It should be noted however that I made two additional changes to the test year on my rate year schedule (first column). The two changes were to add net operating income at 1.5%, and the second change was to show the contribution from the prior year debt coverage allowance to pay for the capital items purchased in the test year.

RATE YEAR (FYE JUNE 30, 2004)

Q. Mr. Edge, how would you like to proceed with your rate year testimony?

A. In an attempt to reduce the issues in this docket, I have reviewed the test year accounts to determine the best approach for dealing with the more than 100 revenue and expense accounts in the NBC chart of accounts. I observed that the accounts fell into five sub-groups of related accounts that could be reviewed and evaluated either together or in a similar manner. All other accounts would have to be analyzed separately. The groups are as follows:

1. Revenue accounts (20 accounts #41000-#49005).
2. Personnel services (12 accounts on my rate year schedule). These accounts are the payroll and payroll related accounts.
3. Capital outlays (11 accounts #16200-#19300). Amounts spent on capital assets using operating revenues. These accounts were capitalized for GAAP purposes but must be treated as current year expenditures for ratemaking purposes.
4. Thirty-four expense accounts and four revenue accounts that have balances in the test year of less than \$100,000. (Note: A \$100,000 balance represents only about 0.3% of the total cost of service.) These accounts were left at test year levels.
5. Three accounts that appear to fluctuate from year to year so a three-year average was used as the most appropriate method for projecting the rate year level of expenditure.
6. All other accounts must to be analyzed separately.

I strongly believe that analyzing accounts in groups rather than individually whenever possible reduces the number of issues and reduces the scope of testimony in the docket. Whenever possible I try to leave account balances at test year levels because the test year is the actual amounts spent and therefore provides a good basis for the rate year balance.

1 **REVENUES:**

3 **Q. Mr. Edge, how did you project rate year revenues?**

4 A. First, and most importantly, I adjusted the test year revenue levels to reflect the
5 \$8,834,420 increase allowed in the recent abbreviate rate filing. Since the increase from
6 the abbreviated filing was implemented for consumption on and after June 6, 2002
7 virtually none of the rate increase is included in the test year (FYE June 30, 2002).
8 However, the total increase should be implemented by the rate year FYE June 30, 2004.

9
10 To determine the line item allocations for the \$8,834,420 adjustment I used the
11 abbreviated filing increases (by line item) plus the actual test year levels of revenue (by
12 line item) to arrive at the rate year levels of revenue. The result was \$719,989 less
13 revenue than was anticipated by the abbreviated filing. The comparison is as follows:

14

Account	Per WEE - 4	Per Docket 3409	Difference
Flat Fee Residential	\$7,699,246	\$7,711,974	\$(12,728)
Measured Fee (Res.)	14,945,977	15,166,974	(220,997)
Flat Fee (C & I)	4,972,261	5,260,830	(288,569)
Measured Fee (C)	11,807,677	11,200,421	607,256
Measured Fee (I)	2,246,872	3,019,097	(772,225)
Discharge Permit Fee	1,084,693	1,120,894	(36,201)
Septage Income	741,233	721,895	19,338
BOD/TSS	146,898	154,954	(8,056)
Connect Permit Fees	66,156	73,962	(7,806)
	<u>\$43,711,013</u>	<u>\$44,431,001</u>	<u>\$(719,988)</u>

15
16 To some extent the increase in commercial measured fee revenue is the result of
17 reclassifications from industrial measured fee revenue. NBC has been reclassifying
18 accounts for the last year or so. The only other significant differences are Measured Fee
19 Residential and Flat Fee Commercial and Industrial. Both of these differences are the
20 result of actual test year revenues being less than expected. In other words the actual
21 revenues were less than the estimated revenue levels from the abbreviated docket. The
22 abbreviated docket used the units and consumption levels of the previous full rate filing
23 that are currently excessive.

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Q. Does the fact that the test year actual revenue amounts are lower than the projected revenues from the abbreviated filing suggest that the test year revenue is wrong?

A. Absolutely not. The test year revenue levels are actual amounts. I believe that the differences calculated above are reflections of the fact that the projections made in the full rate case two years ago are too high now. I'm inclined to leave the revenues that were impacted by the abbreviated filing at the test year levels plus the abbreviated filling dollar increases.

Q. By providing the abbreviated rate case increases (dollar amounts) to lower test year balances aren't you projecting a greater than 24.8% (approved percentage increase for the abbreviated filing) rate impact for the rate year?

A. Yes. This provides a small growth factor for revenues in the rate year. The rate year units will be adjusted as part of the revenue check to account for this proposed revenue growth. Given that the actual tariff revenue for the test year and the projected tariff revenue from the abbreviated filing were only 1.6% apart, I consider the test year revenue levels plus a minor revenue growth as representative of a normalized level of revenue and reasonable.

Q. Mr. Edge, how did you project the remaining revenue accounts?

A. The approach varies somewhat from account to account, but I reviewed each account and my findings are as follows:

1. Miscellaneous operating income (account #44502), Reimbursed Collection Costs (account #47000), Abatement Fees, and Miscellaneous Income (account #49002) are all small accounts (less than \$100,000), therefore, I have left them at adjusted test year levels in the same manner that I have left the small expense accounts (less than \$100,000) at test year levels.

1 2. Test year interest income in the amount of \$244,713 appears to be a normal
2 level of interest income. In the last docket we made a significant adjustment
3 to reduce the interest income in the test year to a level of \$250,000 that we
4 estimated at that time was a normal level of interest income. Based upon the
5 current year to date interest earned at that time we projected interest income
6 for the rate year (CYE December 31, 2001) of \$220,000. It appears to me
7 that the test year level of interest \$244,713 is an appropriate level for the rate
8 year.

9
10 3. Late charge revenues have decreased significantly in the test year to \$470,674.
11 Each year as collection efforts have improved, resulting in a better aging of
12 account receivables, the late charge revenue has decreased. I do not believe
13 that this decreasing trend will continue so I have left the late charge collection
14 revenue at the test year level.

15
16 **Q. Does that complete your review of revenues for the rate year?**

17 A. Yes it does.

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1 **EXPENSES:**

2
3 **Q. How would you like to proceed with your review of expenses?**

4 A. As stated above, I have identified 34 expense accounts (See Schedule WEE-5) that
5 are insignificant and as such I have left these balances at test year levels. In addition,
6 three accounts were considered more appropriately projected using a three-year average
7 (See Schedule WEE-6).

8
9 Payroll:

10 The next group of accounts that I reviewed was the payroll and payroll related accounts.
11 These accounts are impacted from year to year by changes in work force, salary and step
12 increases, cost of living adjustments (COLA), and changes in benefits. Due to the
13 complexity of the transactions in these accounts, it was necessary for me to use a detail
14 schedule (listing all employees) produced by NBC's accounting department for the rate
15 year salary projections. The rate year adjustments to salaries increased the total rate year
16 salaries to \$11,183,080. The total salaries and fringe benefits were reduced by the bond
17 related activity contributions of \$896,645 salary and \$387,889 fringe benefits. It is
18 important to note that all payroll and payroll related items are calculated based on 250
19 employees. The remaining four positions and their related payroll cost are included in the
20 STAR program costs.

21
22 **Q. Have you made an allowance for turnover?**

23 A. No, I have not. In the last docket I estimated that a turnover allowance was
24 appropriate but my review for this docket suggests that a turnover allowance is not
25 appropriate. First, I found the NBC has budgeted for more positions in FYE 2003 than
26 are requested in this filing, therefore the number of employees may actually grow in the
27 near future. Second, NBC is almost at full employment (no inactive vacancies).
28 Further, normal turnover has been significantly reduced due in part to the efficiency of the
29 Human Resource Section and partially because NBC replaces positions with the best
30 qualified individuals available, often paying as much or more to the new employee.

1 **Q. How does the current staffing request in this docket compare to the PUC**
2 **approved staffing level in the last docket?**

3 A. Included in this filing are 254 equivalent full time positions. In the last docket the
4 Commission approved 241 positions. The additional thirteen positions added since the
5 last filing were six positions added in the capital program (these positions are not charged
6 to operations and end when the Bucklin Point capital program ends), four new positions
7 in the STAR Program (currently vacant, see page 24), one new position in finance (to do
8 the additional work for capital projects, and SRF borrowing), one new position in security
9 as a result of the terrorist attacks, and one new position in accounting primarily for capital
10 related activities.

11
12 **Q. How did you calculate the rate year level of expense for payroll related**
13 **accounts?**

14 A. Some of the payroll related accounts are functions of gross payroll (FICA, pension,
15 union retiree health and disability) while others are calculated using the rate year rates
16 (salary and fringe reimbursement and overtime). See Schedule WEE 7 for my
17 calculations. Lastly, the account Workers Comp-Old Claims was left at the test year
18 level to cover estimated claims in the rate year.

19
20 **Q. Have you prepared a schedule for health insurance?**

21 A. Yes. I have prepared a separate schedule to calculate the health insurance, dental and
22 vision costs for the rate year (see Schedule WEE-8). I have calculated rate year health
23 insurance by multiplying the number of employees in each type of coverage by the rate
24 for the rate year.

25
26 **Q. Mr. Edge, although you have already covered many accounts relating to**
27 **revenue, payroll, health insurance and accounts with minor balances it appears that**
28 **there are still many accounts left to review, is that correct?**

29 A. Yes there are still more than 25 expense accounts left to discuss. I have reviewed
30 these accounts and made adjustments as follows:

- 1 1. Sludge Loading/Disposal (account #52641) is a very significant account. The
2 test year level of expenditure was \$1,901,367. Fortunately, NBC expects to
3 reduce this expense for the rate year. I calculated the reduction by
4 multiplying the test year level of usage by the lower rates that will be in place
5 during the rate year for contracted sludge disposal services at Bucklin Point. I
6 calculated that the rate year cost for this account would be only \$1,746,261 a
7 reduction in the cost of service of \$155,106. My rate year calculations for
8 this account are shown on Schedule WEE-9.
9
10 2. Trash Grit Removal (account #52642) must be increased for the rate year to
11 reflect certain known and measurable items. The fee for the landfill will
12 increase in from \$47 in the test year to \$53 for the rate year, or 13%. This
13 represents an \$11,772 increase in the rate year expense level. A second
14 increase is the result of a interceptor cleaning project that will require the
15 removal of 364 tons of waste @ \$54/ton or \$19,656. Also, NBC must
16 maintain a new CSO program using nets for floatables control. The cost of
17 these disposable nets is \$60,500 (500 nets/year @ \$121 per net). Removal of
18 the nets and the items collected cost \$4,028 per year (76 tons @ \$53/ton).
19 The total adjustment is \$95,955 (See Schedule WEE-10). Refer to the
20 testimony of Tom Brueckner for more information on the Floatables Control
21 project.
22
23 3. Bad debt expense (account #53200) was adjusted in the test year to be
24 consistent with the Division's approach in the last docket. Therefore, I have
25 left bad debts at the test year level.
26
27 4. Postage (account #53210) in the test year was \$123,777. The U.S. Post
28 Office has recently raised the cost of mail by 8.8% (\$.34 to \$.37) therefore I
29 have projected an 8.8% increase for the rate year in this account (See Schedule
30 WEE-11).
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5. Telephone & Telegraph (account #53220) was adjusted in the test year.
Given that there is no increase expected in the use of phones and the rates are expected to stay relatively stable, I have set the rate year level of expense for this account at the test level.

6. Insurance expense (account #53260) was normalized in the test year reducing the expense to properly reflect only one year of pollution insurance expense. The increase from the test year actual insurance expense (\$394,686) to the interim year (June 30, 2003) actual insurance expense (\$487,256) was 23.4%. NBC contacted its insurance agent for an estimate of the increase that can be expected for the rate year June 30, 2004 and was told that NBC could expect another 25% increase. These very large increases are the direct result of the insurances companies adjusting after September 11, 2001. The only insurance coverage that will not be impacted by the 9-11 increases is Workers Compensation, which was increased only to the interim year level of expenditure. (See Schedule WEE-12).

7. Automotive Maintenance (account #53510) has been growing for the last three years showing a definite upward trend. Although I could have projected a continuation of the growth trend, I chose to remain conservative and left the account at the test year level.

8. Equipment Maintenance Agreements (account #53630) is the account that is used to account for all of the NBC service contracts. Schedule WEE-13 reflects the increases and decreases in the service contracts expected in the rate year. Greater than sixty percent of the increase over the test year level of expenditure is do to the new floatables maintenance agreement for \$65,000 that relates to the new floatables program.

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9. Rental-Outside Property (account #53810) previously included two building leases, 459 Promenade and 235 Promenade, plus a railroad easement (in the last docket the cost was \$457,020). With the NBC move to new office space that they own, the only cost that will remain in this account in the rate year is the railroad easement of \$2,107. (See Schedule WEE-14).

10. The gas costs for NBC are very complicated so I followed the same procedure as in the last docket in choosing to accept the expertise of NBC’s staff for projecting the two gas accounts for the rate year. The fuel gas account (account #54060) was increased by a net \$20,227 over the test year and the fuel gas-incinerator account (account #54061) was reduced by \$106,951 due to a lower contract price on natural gas (See Schedules WEE-15 and WEE-16).

11. NBC categorizes electricity usage into four main areas; Bucklin Point WWTF; Field’s Point WWTF; Interceptor Maintenance, including pumping stations, and the septage receiving station; and the Administrative Facilities, which include the Corporate Office Building and Laboratory.

Bucklin Point and Field’s Point are wastewater treatment plants that use different levels of electricity based upon sewer flow resulting from ratepayer usage and weather. Rather than use the test year levels of electric usage for these two plants, I felt that it would be appropriate to use the average of the last three years (note the average of the last three years was lower than the test year).

1 The Interceptor Maintenance usage has continued to rise. Although I would
2 have continued the upward trend, the staff at NBC chose to use the three- year
3 average.

4
5 Lastly, the electric use at the new Administrative Facilities is far greater than
6 the previous facilities; therefore a three-year average was inappropriate.
7 Instead NBC has estimated the usage for a full year at the new administrative
8 facility based upon the usage since the occupation of the new building. The
9 estimated usage was then multiplied times the expected 2004 rates. See
10 Schedule WEE-17.

11
12 In addition, this account was adjusted to reflect the new contracted rates for
13 electricity supply that became effective on January 1, 2003.

14
15 12. There are four chemical accounts: Chemical-Chlorine/Hypochlorite (account
16 #54332), Chemical-Lime (account #54334), Chemical-Polymer (account
17 #54335) and Chemical – Sodium Bisulfite (account #54337). Two of the
18 accounts (#54334 and #54337) have balances less than \$100,000 so I
19 automatically left them at the test year level.

20
21 The other two deserve additional consideration. Chlorine/Hypochlorite has
22 fluctuated a lot from year to year as a result of usage (sewer flow). In
23 addition, I had to consider that the price of this chemical fluctuates from year
24 to year. The four-year average of this expense account is less than the test
25 year but not significantly less. Offsetting the fact that the four year average is
26 less than the test year is the fact that the price is expected to increase in March
27 2003 from \$.38/gal. to \$.43/gal. Given these two offsetting facts, I chose to
28 continue my approach of leaving accounts at the test year level if I had no
29 strong evidence that the test year level was either significantly over or
30 understated.

1 The four-year average for Sodium Bisulfite was even closer to the test year
2 level. Given the above facts, I chose to leave all of the chemical accounts at
3 the test year levels.

4
5 13. Medical, Surgical, and Lab (account #54340), has increased in the last two
6 years due to additional sampling needs resulting from federal and state
7 requirements. It is not expected that this trend will reverse, therefore it
8 appears reasonable to project the rate year level for this account at a level
9 equal to or greater than the test year. I have left this account at test year level.

10
11 14. Computer Supplies (account #54420) has increased significantly in the test
12 year and is expected to increase again in the rate year. Part of the reason for
13 the increase is the new more reasonable capitalization policy that changes the
14 threshold for capitalization. This change moves certain smaller dollar items
15 that were previously capitalized into expense accounts. This management
16 decision was made so that small supply items (especially computer supplies)
17 would not have to be capitalized and depreciated. Although it is expected
18 that this account will increase in the rate year, there is nothing to substantiate
19 this; therefore, I have left that account at the test year level.

20
21 15. Regulatory expense is estimated for the rate year at \$151,495 that includes the
22 annual PUC assessment, permits, the unamortized cost of Docket #3162, one
23 third of the cost of the abbreviated filing and one third of the estimated costs
24 of this filing. The abbreviated filing costs (\$31,651) were removed from the
25 test year through a normalizing adjustment. Subsequent payments made after
26 the test year in the amount of \$6,236 were added to the abbreviated filing test
27 year costs. The \$12,705 amortization amount for the abbreviated filing was
28 calculated by dividing the total abbreviated filing cost \$43,888 by three (3).

1 The estimated costs relating to this filing are as follows:
2
3

	<u>Amount</u>
NBC legal, accounting and rate expense	\$67,850
Division expert expense	10,000
Commission expense	1,500
Total	<u>\$79,350</u>

4

5 The rate year allowance for this docket is estimated at \$26,450. See Schedule
6 WEE-18 for calculation of the total regulatory expense (\$151,495). It should
7 be noted that with the exception of the \$5,772 recent bill from the PUC the
8 rate case expense for Docket #3162 will be fully amortized by the rate year.
9

10

11 16. The balance of the legal services account fluctuates from year to year and is
12 normally a good candidate for the three-year average schedule. In this case
13 however, I felt that the three-year average was misleading because certain
14 legal expense related to rate case filings is included in the last three years.
15 Instead I made an adjustment in the amount of \$8,951 reducing the test year
16 level of expenditure for this account. Please note that the three-year average
17 would have been greater. (See Schedule WEE-19)

18

19 17. Management/Audit Services (account #52670) is a very substantial account.

20 The two largest line items in this account are the US Filter contract to manage
21 the Bucklin Point treatment facility (\$1,361,821) and the implementation of
22 the CSO abatement fee amortized over two years (\$290,000). The US Filter
23 adjustment is merely a CPI adjustment factor included in the contract. The
24 CSO abatement fee is the estimate of the cost for NBC to implement the
25 study. Refer to testimony filed as part of Docket #3432. For a listing of the
26 test year and rate year costs for this account please see Schedule WEE-20.

1 18. Special Clerical Services (account #52680) has been adjusted to eliminate the
2 court reporter fee associated with Docket #3409. See Schedule WEE-21.

3
4 19. All Other Special Services (account #52690) has been a substantial account
5 over the past four years. The test year level before normalization \$348,876 is
6 the lowest balance in four years. After the normalization adjustments the test
7 year balance was reduced to \$208,273. Although I would like to average this
8 account it would be incorrect because the items charged to this account have
9 changed over the years. NBC has suggested that this account be left at the
10 test year normalized level and I agree.

11
12 20. The STAR Program (Sampling, Testing, and Analysis of Rivers) is a new
13 program. See WEE-22 and the testimony of Juan Mariscal for details on this
14 program and the four new positions.

15
16 21. Capital outlays will increase from the adjusted test year level of \$1,151,216 to
17 the rate year level of \$1,892,350. Although different items are purchased
18 each year, NBC has identified significant capital improvements that will be
19 required in the rate year and in the future. A detail listing of the items
20 proposed for the rate year is included on schedule WEE-23.

21
22 These capital items are offset in their entirety in both years (test and rate) by
23 the carry forward of funds from the prior year debt coverage reserve. (Note:
24 the debt coverage reserve was identified as a revenue source in subsequent
25 years to pay for capital related items in the last docket. Specifically the pay as
26 you go capital items were to be funded.) Therefore, the pay as you go capital
27 items no longer have an impact on the operating budget or this rate request.
28

1 **Q. Mr. Edge, I note that you have left for last your review of debt service expense**
2 **(interest and principal) and coverage allowance. Would you like to review these**
3 **significant accounts at this time?**

4 A. Before explaining the debt service amounts in my rate year it is necessary for me to
5 first explain a little bit about the financing models provided by First Southwest Company.

6
7 The First Southwest models calculate the level of borrowing needed to address capital
8 needs using either TECP or OMB. The models include NBC's potential sources of
9 capital funds including Bay Bonds, SRF loans, grants, prior year surpluses (coverage
10 allowance reserve) and new financing (either TECP or OMB). Uses of funds are
11 identified as operating capital, Capital Improvement Program (See Schedule WEE-24),
12 refinancing requirements and debt issuance costs. The models compare the sources of
13 capital funds to the uses of (needs for) capital funds and the amount of new borrowing is
14 then determined to balance the sources and usages of capital funds by year. The internal
15 workings of the model for the calculation of interest, principal and cost of issuance are
16 considered by the bank to be proprietary. Nevertheless, the model is a useful tool for
17 calculating the debt service needs for the rate year(s). (See WEE-25 and WEE-26).

18
19 Please refer to the testimony of Maureen Gurghigian for further discussion of the relative
20 advantages of Variable Rate Bonds in Tax-Exempt Commercial Paper mode (TECP)
21 versus Open Market Bonds (OMB).

22
23 **Q. What did you do with the models prepared by First Southwest?**

24 A. I attempted to simplify the model and present the figures from a rate setting
25 perspective in order to illustrate the options and assess rate impacts. In doing so I
26 prepared five schedules from the information included in the models as follows:

- 27
28 ➤ Summary schedule first year and two-year average for both TECP and OMB (See
29 Schedule WEE-27).
30 ➤ A TECP schedule using a two-year average and then four automatic rate increases
31 (See Schedule WEE-28).

- A TECP schedule showing all individual years of the TECP approach that includes the rate year and five automatic rate increases (See Schedule WEE-29).
- An OMB schedule showing the two-year average approach and the subsequent increases required (See Schedule WEE-30). This is the schedule that I used for my rate year filing.
- An OMB schedule showing all individual years of OMB borrowing (See Schedule WEE-31).

Using the OMB schedule WEE-30 I calculated the average debt service payments for FYE 2004 and 2005 (\$25,524,784). I then took the 2005 coverage requirement of \$7,300,819 and posted the debt service and coverage requirements to my rate year schedule WEE-4. Lastly, I compared the debt service payments allowed in the abbreviated docket with the actual debt service costs for FYE June 30, 2003. The difference is the result of a two-year averaging approach used in the abbreviated filing that provided extra debt service revenue in 2003, and inadequate debt service revenue in 2004. The credit of \$2,025,910 (See Schedule WEE-32) is one half of the 2003 overage (\$4,051,820) and acts as a reduction of the debt service needed in the rate year. I used only one half of the savings from FYE 2003 because I am calculating rates that will be in effect for two years (2004 and 2005).

Q. Mr. Edge, you mentioned earlier that NBC was going to present two alternatives to the Commission that would lower the required rate increase. Is that correct?

A. Yes, that is correct.

Q. Would you please explain the two alternatives?

A. Certainly, first however, I would like to present a little background as to how NBC reached its' current position of addressing the possibility of using TECP and OMB borrowing. NBC needed to address the following three significant factors in its review

1 of financing options:

- 2
- 3 1) State Revolving Fund (SRF) capacity limitations.
- 4 2) Flexibility in borrowing to cover cash flow needs.
- 5 3) The need to identify full ratepayer impact of the capital program as
- 6 requested by the PUC.
- 7

8 The NBC develops a five-year Capital Improvement Plan (CIP) on an annual basis. As
9 part of the planning process for these capital budgets, funding needs and sources are
10 identified. The primary funding source has traditionally been subsidized loans from the
11 Rhode Island Clean Water Finance Agency (RICWFA). This source has the least
12 ratepayer impact, as loans are made to qualifying borrowers at a rate that is 2/3 of the
13 borrower's market rate under the traditional subsidized program..

14

15 As indicated in the testimony of Anthony Simeone, the RICWFA's loan capacity is
16 limited by the amount of federal and state capitalization grants, as well as by the
17 investment income stream from prior loans. In the past, RICWFA has been confident that
18 they could fund NBC's entire CIP. However, recently they have been working with their
19 financial advisor to assess their lending capacity and the needs of other borrowers. Based
20 on this analysis, it appears that RICWFA will not be able to loan NBC more than \$60
21 million annually for the next two years, unless there are additional state or federal
22 appropriations. For the purpose of this filing, and the First Southwest model, we have
23 assumed that the RICWFA will be able to loan the NBC \$60 million annually.
24 Regardless, the NBC's capital needs exceed this amount, leaving on average a \$25
25 million gap per year over the next five years.

26

27 **Q. Why is there a need for flexibility in borrowing?**

28 A. NBC began construction of two significant construction projects. As indicated in the
29 testimony of NBC staff, the FY 2004 – 2008 CIP reflects costs of approximately \$334
30 million over the next five years and \$102 million in FY 2003. As NBC moved from
31 design to construction and as construction contracts have been executed, cash flows have

1 been revised. One example is Contract 807: Improvements to the Bucklin Point
2 Wastewater Treatment Facilities. Once the project was bid, the contractor revised the
3 cash flow schedule which accelerated cash flows by approximately \$20 million. Please
4 refer to WEE-38 for a graphical illustration of the accelerated cash flows. NBC must be
5 in a position where it can meet its contracted commitments.

6
7 **Q. What is the need for determining the ratepayer impact of the CSO program?**

8 A. During the NBC's last rate case, the PUC emphasized the need to have a long-term
9 financing plan so that the full ratepayer impact of the CIP, and specifically Phase I of the
10 Combined Sewer Overflow (CSO) program, could be identified. The long-term debt
11 model developed by NBC's financial advisor was used to support this filing. It identifies
12 additional debt service and debt service coverage over the next six years.

13
14 **Q. How did these requirements lead NBC to its financing proposal in this filing?**

15 A. We are requesting that the PUC accept the multi-year debt service and debt service
16 coverage allowances using a new financing model (TECP) that provides a solution to the
17 SRF borrowing limitations, offers maximum flexibility and reflects a long-term financing
18 plan in order to access ratepayer impact. It is NBC's position that an automatic increase
19 for the next six years with annual true-ups and compliance filings is in the best interest of
20 the ratepayers.

21
22 **Q. What are the alternatives?**

23 A. We filed in this docket a request for rates using Open Market Bonds (OMB)
24 financing. The OMB financing addresses the issue of the shortfall in available SRF
25 financing but it does not address the other two concerns discussed above. Consistent
26 with the abbreviated filing NBC has requested two year averaging of debt service with the
27 maximum SRF funding and OMB financing for the shortfall. The result is a 31.1 percent
28 increase in the rate year FYE June 30, 2004 and FYE June 30, 2005. This approach
29 provides NBC with adequate funding over the next two years.

Alternative 1 is to modify the borrowing vehicle to use variable rate tax-exempt commercial paper (TECP). Using a two-year average and the TECP borrowing model NBC can reduce the rate increase from 31.1% to 21.6%, a significant reduction. However, it is important to note that to do so the PUC will have to approve automatic debt service rate increases for the entire TECP model program period. These increases result in rate increases of 21.72% in 2006, 7.30% in 2007, 3.87% in 2008 and 2.05% in 2009.

Q. What do you mean by “automatic rate increases”?

A. The PUC would have to approve automatic rate increases for future years to assure the investors in the TECP that there will be rates in the future adequate to support future SRF borrowing to “take-out” the TECP. In other words, the TECP is a short-term financing vehicle that will bridge the funding gap and allow NBC to borrow the money it needs now and for the next few years at very attractive variable rates, and then pay off the TECP when SRF borrowing is once again available. This a double win for the ratepayers. First they pay less in the interim period, and second, they are not locked into market rates in the future when they take out the TECP with proceeds from SRF borrowing. The testimony of others provides a thorough description of TECP and the associated legal requirements. In my opinion this financing approach is very favorable to the ratepayers.

Q. You mentioned two alternatives, what is the second alternative?

A. If the PUC prefers, it can reduce the rate request even further by accepting the TECP approach but by eliminating the two-year average. NBC prefers the two-year average but since the PUC must approve future increases at the same time it accepts the program NBC does not require the averaging approach. The increases needed if the PUC accepts the TECP approach without averaging are 9% in 2004, 20.72% in 2005, 12.51% in 2006, 7.30% in 2007, 3.87% in 2008 and 2.05% in 2009. The rate in 2009 using either Alternative 1 or Alternative 2 for the average residential ratepayer will be \$344.96. Please refer to the table on the following page for a comparison of financing alternatives.

Comparison of Financing Alternatives						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
As Filed (Two-Year Average)	31.10%		24.25%	6.89%	1.06%	-0.65%
Alternative 1 (Two-Year Average)	21.62%		21.72%	7.30%	3.87%	2.05%
Alternative 2	9.00%	20.72%	12.51%	7.30%	3.87%	2.05%

Q. Is the impact on the ratepayers the same under Alternative 1 and Alternative 2?

A. In the years 2007 through 2009 the impact is the same. The only differences in the two alternatives are in 2004, 2005 and 2006. Alternative 1 is better for the ratepayers in the second year (no increase) while Alternative 2 is better for the ratepayers in the first year.

Q. Which Alternative do you recommend?

A. Alternative 1 is better for both NBC and the ratepayers in my opinion and it is consistent with previous PUC orders. Alternative 2 is great in the first year but sends a false message to the ratepayers.

Q. How are you proposing to handle debt service coverage?

A. The debt service coverage amounts were derived from the model developed by First Southwest and reflect coverage of 125% of principal and interest on all debt. In the abbreviated filing, NBC proposed that the capital outlay allowances be used as part of the debt service coverage calculation. The PUC approved this concept and expressed interest in using the surplus debt coverage from prior years to establish a “pay as you go” capital program. The First Southwest models specifically address this by including a line item for “operating capital” along with a capital source of “surplus revenues from prior year.” This will prevent huge accumulations of cash and also serves to mitigate rate impacts. Additional discussion of this issue is on page 25 of my testimony.

1

2 **Q. Have you prepared a revenue check (proof) for the rate year and does that**
3 **conclude your rate year analysis?**

4 A. Yes I have, please see WEE-34 and yes, that concludes my rate year analysis.

5

6

7

1

2 RATE DESIGN ISSUES

3

4 **Q. You have stated earlier in this testimony that there are no rate design issues, is**
5 **that correct?**

6 A. Yes. NBC is requesting that the increase be implemented on an across the board
7 basis.

8

9 **Q. Mr. Edge, did you do a cost allocation study?**

10 A. No. Two dockets ago an extensive rate design study was completed costing over
11 \$100,000. The current rates reflect the full implementation of that rate design study.

12

13 **Q. Mr. Edge, are you familiar with the Stormwater Fee Study conducted by**
14 **Parsons Engineering?**

15 A. No. I have not read the Parsons Engineering study dated March 4, 2002. I am aware
16 however that there is currently an open docket (PUC Docket 3432) on this issue, in which
17 I have no involvement.

18

19 **Q. Have you completed a comparative analysis of current and proposed rates and**
20 **the impact on ratepayers?**

21 A. Yes, see Schedule WEE-35.

22

23 **Q. Do you have any other comments?**

24 A. Yes, see other issues.

25

26

27

28

29

30

1

2 OTHER ISSUES

3

4 **Q. Mr. Edge do you have any other issues that you would like to address?**

5 A. Yes there is one. There has been some confusion over the fact that CSO costs
6 appear to change with the passage of time. I believe that my schedules WEE-36 and
7 WEE-37 will be helpful in tracking changes from the last docket to this docket.
8 Explanation of the variances can be found in the testimony of others. I recommend that
9 this schedule be updated with each future full filing or compliance filing.

10

11 **Q. Please explain your schedules WEE-36 and WEE-37.**

12 A. Schedule WEE-36 is a schedule comparing the 2003-2007 CIP and the 2004-2008
13 CIP. The schedule is divided into three sections: Wastewater Treatment Facility
14 Improvements, Sewer System Improvements and Building & Grounds Improvements.
15 The Sewer System Improvements section is further divided into two sub-sections, Phase I
16 CSO Facilities and Other Projects. The Phase I CSO is further divided into Design and
17 Construction.

18

19 This schedule clearly shows the differences (pluses and minuses) between the 2003-2007
20 CIP and the 2004-2008 CIP in the last column on the right. These increases and
21 decreases are explained in detail in the testimony of others but I believe that some
22 additional clarification of my schedules is appropriate. First, the columns FY 2003-2007
23 and FY 2004-2008 agree to the summary page in the CIP for those years.

24

25 **Q. Please provide your additional comments.**

26 A. Projects 104C, 109.02, Site Specific, 302.04C, 302.05C, 302.07C, 302.20C, 304.03
27 and 904 are expected to be substantially completed before June 30, 2003 and therefore
28 have no additional expenditures projected in the 2004-2008 CIP. Minor Projects 109.03,
29 113.01P, 114.00P, 115.00P, 302.21, 302.22P, and 304.07D are new projects identified in
30 the 2004-2008 CIP that were not included in the 2003-2007 CIP. The remaining projects
31 have more significant differences and are explained elsewhere.

1
2 **Q. Do you know any of the specifics as to why the remaining projects have**
3 **increased or decreased?**

4 A. Yes. Project 103 Short Term Solids Handling Improvements has been scaled back at
5 this time to include only the cost to demolish the building. This project changes almost
6 weekly. Project 109.01 and 807 are both addressed by Mr. Brueckner. Project 302.03 is
7 further analyzed on WEE-37. Project 302.03RS reflects the addition of the 2008 year.

8
9 Project 302.06.00 OCIP (Owner Controlled Insurance Program) reflects an increase of
10 \$14,187,000, however, this project was originally included as part of Contract 302.06.
11 Accordingly the increase in contract 302.06.00 is offset by a decrease in contract 302.06C
12 of \$15,879,000. The additional \$1,692,000 reduction in contract 302.06C is the result of
13 of a change in a construction technique that will be used for the main spine tunnel.

14
15 As stated in Joseph Pratt's testimony, Project 302.08C Overflow 004/061 was divided
16 into two projects resulting in a decrease of \$3,105,000 in the original project and an
17 increase of \$9,847,000 in the new Project 302.15C.

18
19 Projects 304 Evaluation and Cleaning of CSO Interceptors and 304.11C floatable Control
20 System Implementations are two projects that are significant additions in 2008. These
21 two projects are explained in detail in the testimony of others and in the 2004-2008 CIP.
22 The balances in Project 304 and 304.04 off set each other. Many of the other remaining
23 smaller projects show increases directly related to the addition of the year 2008.

24
25
26 **Q. What is the purpose of Schedule WEE-37?**

27 A. Based upon a detailed review of the construction portion of the CSO project it was
28 determined that the staff (overhead) allocation was understated. Originally NBC
29 estimated that staff allocation would be \$1,000,000. After further review it was
30 determined that the estimated staff allocation was greater than \$3,000,000. Schedule
31 WEE-37 shows the allocation of \$3,382,000 for Staff /Police Details/Legal Costs.

1

2

3 **Q. How is the staff allocation reflected in the rate filing?**

4 A. The staff allocation is a reduction of the revenue requirement in the rate filing. On
5 WEE-7 I have reduced the salary and fringe expense for allocations of staff to capital
6 projects. In other words the increase identified in the staff allocation results in a
7 reduction of the rate increase.

8

9 **Q. Does that conclude your testimony?**

10 A. Yes it does.

Narragansett Bay Commission
Direct Testimony by Walter E. Edge Jr., MBA, CPA
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Narragansett Bay Commission
Test Year

Schedule WEE-1

Acct. #	Account Description	TY 2002	TY Adjustments	Adjusted TY 2002
Revenue				
41000	FLAT FEES RESIDENTIAL	\$ 6,165,839	\$ -	\$ 6,165,839
41100	MEASURED FEE - RESIDENTIAL	11,930,258		11,930,258
41501	FLAT FEES COMMERCIAL	3,459,797		3,459,797
41502	FLAT FEES INDUSTRIAL	466,426		466,426
41510	MEASURED FEE - COMMERCIAL	9,580,646		9,580,646
41511	MEASURED FEE - INDUSTRIAL	1,646,572		1,646,572
42000	DISCHARGE PERMIT FEES	861,821		861,821
42500	CONNECTION PERMIT FEES	51,450		51,450
43000	BOD/TSS SURCHARGE	116,088		116,088
43500	SEPTAGE INCOME	597,696		597,696
44502	MISCELLANEOUS OPERATING INCOME	30,764	6 (28,881)	1,883
45100	INTEREST INCOME	244,713		244,713
45500	LATE CHARGE PENALTY	470,674		470,674
46500	ENVIRONMENTAL ENFORCEMENT	5,060	14 (5,060)	0
47000	REIMBURSED COLLECTION COSTS	16,981		16,981
47500	GRANT	1,132,839	8 (1,132,839)	0
	ABATEMENT FEE	4,428		4,428
	ARBITRAGE REBATE	260,632	1 (260,632)	0
49005	CAPITAL CONTRIBUTIONS	9,064,450	5 (9,064,450)	0
49002	MISCELLANEOUS INCOME	32,560	7 (31,039)	1,521
	TOTAL REVENUE	46,139,694	(10,522,901)	35,616,793
Expenses				
Personnel Services				
	SALARIES & WAGES	10,387,021	8 (48,643)	10,338,378
	OVERTIME	464,876		464,876
	EMPLOYEE RET. BEN - STATE & SEP	821,082	8 (1,543)	819,539
52810	EMPLOYEE RET.BEN.-FICA	814,872	8 (2,295)	812,577
52820	EMPLOYEE BENEFITS-UI	31,638		31,638
52940	RETIREMENT HEALTH - STATE	33,886		33,886
52950	EMPLOYEE BEN.-HEALTH INS.	1,568,933	8,16 (2,748)	1,566,185
52990	EMPLOYEE BEN-DISABILITY INS.	26,197		26,197
54950	HEALTH INSURANCE-RETIREEES	1,646		1,646
55700	WORKERS COMP-OLD CLAIMS	152,662		152,662
	<i>Total Personnel Services</i>	14,302,813	(55,229)	14,247,584
59000	SALARY REIMBURSEMENT	(627,818)		(627,818)
59001	FRINGE REIMBURSEMENT	(300,072)		(300,072)
	<i>Net Personnel Services</i>	13,374,923	(55,229)	13,319,694
Operating Supplies & Expense				
52610	MEDICAL SVCS.	8,220		8,220
52640	BLDG. & GRND. MAINT.	98,863		98,863
52641	SLUDGE LOADING/DISPOSAL	1,901,367		1,901,367
52642	TRASH/GRIT REMOVAL	116,485		116,485
53200	BAD DEBT EXPENSE	206,109		206,109
53210	POSTAGE	123,777		123,777
53220	TELEPHONE & TELEGRAPH	138,807	8,17 19,407	158,214
53230	OFFICE EXPENSE	93,949	8 (700)	93,249

Narragansett Bay Commission
Test Year

Schedule WEE-1

Acct. #	Account Description	TY 2002	TY Adjustments	Adjusted TY 2002
53240	DUES & SUBSCRIPTIONS	29,954		29,954
53250	FREIGHT, CART. & EXP.	40,171	8 (67)	40,104
53260	INSURANCE	422,341	9 (27,655)	394,686
53270	CENTRAL PHONE SVCS.	22,965	17 (16,900)	6,065
53310	PRINTING & BINDING	85,396		85,396
53320	ADVERTISING	17,355		17,355
53410	MILEAGE ALLOWANCE	2,572		2,572
53420	OUT-OF-STATE TRAVEL	49,026	8 (525)	48,501
53510	AUTOMOTIVE MAINTENANCE	126,859		126,859
53610	REPAIR-BLDG & STRUCTURE	625,092		625,092
53611	INCINERATOR	228,395		228,395
53620	REPAIR-HIGHWAY & WALKS	4,380		4,380
53630	EQUIPMENT MAINTENANCE AGREE	363,142		363,142
53640	GENERAL REPAIRS	18,878		18,878
53810	RENTAL-OUTSIDE PROPERTY	180,687		180,687
53820	RENTAL- EQUIPMENT	17,746		17,746
53830	RENTAL- CLOTHING	61,595	13 (17,045)	44,550
54020	FUEL OIL #2	231		231
54021	FUEL OIL #2 - INCINERATOR	9,967		9,967
54060	FUEL-GAS	174,105		174,105
54061	FUEL- GAS - INCINERATOR	427,954		427,954
54090	ELECTRICITY	1,546,871	15 357,888	1,904,759
54110	WATER	67,872		67,872
54200	CLOTHING & CLOTHING MAT.	23,625		23,625
54210	SAFETY EQUIPMENT	17,005		17,005
54320	SPECIAL EDUC. SUPP. & EXPENSES	10,470	8, 14 (10,470)	0
54330	HH,LAUND. & CHEMICALS	20,826		20,826
54332	CHEM-CHLORINE/HYPOCHLORITE	352,196		352,196
54334	CHEM-LIME	20,536		20,536
54335	CHEM-POLYMER	100,662		100,662
54337	CHEM-SODIUM BISULFITE	49,986		49,986
54340	MEDICAL, SURG. AND LAB.	145,525		145,525
54360	HIGHWAY & LANDSCAPE	2,242		2,242
54370	BLDG. & MACH. SUPPLIES	148,678	8 (626)	148,052
54371	INCINERATOR	3,491		3,491
54410	EDUCATIONAL SUPP. & EXP.	80,231	8 (1,000)	79,231
54420	COMPUTER SUPPLIES	318,824	8 (4,943)	313,881
54550	OTHER OPERATING SUPP.	1,810		1,810
54590	MISCELLANEOUS EXPENSE	4,168		4,168
55820	EDUCATION SCHOOL AIDE	8,435	8, 14 (7,910)	525
57600	EQUIP LOSSES-CASUALTY THEFT	117,486	12 (117,486)	0
	<i>Total Operating Supplies & Expense</i>	8,637,327	171,968	8,809,295
Special Services				
54430	EXPENSES FOR BONDS & NOTES	2,500		2,500
52600	REGULATORY EXPENSE	108,648		108,648
52620	ARCHITECT/ENG. SERVICES	750		750
52630	LECTURES/ED./PROF. SVCS.	198		198
52650	SECURITY SERVICES	17,804		17,804
52660	LEGAL SERVICES	138,136		138,136
52670	MGMT/AUDIT SERVICES	1,428,847		1,428,847
52680	SPECIAL CLERICAL SERVICES	14,555		14,555
52690	ALL OTHER SPECIAL SERVICES	348,876	11,8 (140,603)	208,273
	<i>Total Special Services</i>	2,060,314	(140,603)	1,919,711

Narragansett Bay Commission
Test Year

Schedule WEE-1

Acct. #	Account Description	TY 2002	TY Adjustments	Adjusted TY 2002
<i>Capital Outlays</i>				
16200	LANDFILL	0		0
16510	AUTOMOTIVE EQUIP.	0	3 26,263	26,263
16520	BLDG. & PLANT EQUIP.	0	3 205,879	205,879
16530	CONSTRUCTION EQUIP.	0		0
16540	ED. AND REC. EQUIP.	0		0
16570	LABORATORY EQUIP.	0	3 34,585	34,585
16580	OFFICE FURN & EQUIP/COMPUTER	0	3 424,059	424,059
16590	OTHER EQUIP.	0	3 6,940	6,940
16610	BUILDING & OTHER STRUCT.	0	3 15,740	15,740
16630	IMP.-NOT BLDG OR STRUCT.	0	3 14,905	14,905
19300	REPLACEMENT RESERVE	0	3 422,845	422,845
	<i>Total Capital Outlays</i>	0	1,151,216	1,151,216
<i>Depreciation & Amortization</i>				
57010	AMORTIZATION	149,406	4 (139,716)	9,690
57500	DEPRECIATION	5,699,783	4 (5,699,783)	0
	<i>Total Depreciation & Amortization</i>	5,849,189	(5,839,499)	9,690
<i>Debt Service</i>				
	DEBT COVERAGE		10 1,801,118	1,801,118
57910	INTEREST	2,877,973		2,877,973
	PRINCIPAL	0	2 4,326,500	4,326,500
	<i>Total Debt Service</i>	2,877,973	6,127,618	9,005,591
	<i>Total Expenses</i>	32,799,726	1,415,471	34,215,197
	<i>Net Income</i>	\$ 13,339,968	\$ (11,938,372)	\$ 1,401,596

Narragansett Bay Commission
Test Year Revenue By Source

Schedule WEE-2

User Fee Revenues

	UNITS	RATES	REVENUE
Residential			
Dwelling Units	112,762	\$54.68	\$6,165,826
Flow	10,652,016	\$1.12	\$11,930,258
Non-Residential - Metered Accounts			
5/8"	3,606	122	439,891.55
3/4"	846	183	154,773.82
1"	1,020	305	311,162.31
1 1/2"	822	610	501,493.56
2"	1,785	976	1,741,951.37
3"	73	1,830	134,424.53
4"	51	3,050	154,800.18
6"	57	6,100	344,678.24
8"	13	9,760	126,890.40
10"	1	14,030	14,031.15
Total Flat Fees from Metered Accounts			\$3,924,097.11
Commercial Consumption	5,877,697	1.63	\$9,580,646
Industrial Consumption	1,568,164	1.05	\$1,646,572
Total User Fee Revenues			33,247,399.11

Miscellaneous Revenue			
DISCHARGE PERMIT FEES	861,821		
CONNECTION PERMIT FEES	51,450		
BOD/TSS SURCHARGE	116,088		
SEPTAGE INCOME	597,696		
MISC. OPERATING INCOME	0		
INTEREST INCOME	244,713		
LATE CHARGE PENALTY	470,674		
REIMBURSE ENFORCEMENT CC	0		
ENVIRONMENTAL ENFORCEMI	5,060		
REIMBURSED COLLECTION CO:	16,981		
GRANT	1,132,839		
ARBITRAGE REBATE	260,632		
REVENUE REQUIREMENT	0		
ABATEMENT	4,428		
CONTRIBUTED CAPITAL	9,064,450		
MISCELLANEOUS INCOME	63,324		
Total Miscellaneous Revenue			12,890,156

Total Revenues: 46,137,555

Total Revenues per Audit 46,139,694

Difference: (2,139)

Narragansett Bay Commission
Four Year Comparison

Schedule WEE-3

ACCT. #	BUDGET ACCOUNT DESCRIPTION	FY 1999 ACTUAL	FY 2000 ACTUAL	FY 2001 ACTUAL	FY 2002 ACTUAL
REVENUE					
41000	FLAT FEES RESIDENTIAL	\$ 4,954,779	\$ 4,913,615	\$ 5,473,167	6,165,839
41100	MEASURED FEE - RESIDENTIAL	9,488,987	9,869,044	9,329,376	11,930,258
41501	FLAT FEES COMMERCIAL	2,833,188	2,759,335	2,984,722	3,459,797
41502	FLAT FEES INDUSTRIAL	522,607	542,802	520,681	466,426
41510	MEASURED FEE - COMMERCIAL	7,044,655	7,274,847	7,620,100	9,580,646
41511	MEASURED FEE - INDUSTRIAL	2,063,984	1,850,196	1,837,494	1,646,572
42000	DISCHARGE PERMIT FEES	939,771	896,287	875,338	861,821
42500	CONNECTION PERMIT FEES	55,350	59,256	57,150	51,450
43000	BOD/TSS SURCHARGE	96,168	156,933	201,261	116,088
43500	SEPTAGE INCOME	492,917	578,357	599,232	597,696
44502	MISCELLANEOUS OPERATING INCOME	37,346	147,890	278,130	30,764
45100	INTEREST INCOME	372,794	431,581	494,964	244,713
45500	LATE CHARGE PENALTY	543,664	523,798	446,311	470,674
46000	REIMBURSE ENFORCEMENT COSTS	0	0	0	0
46500	ENVIRONMENTAL ENFORCEMENT	17,642	49,874	40,639	5,060
47000	REIMBURSED COLLECTION COSTS	0	0	0	16,981
47500	GRANT	47,967	77,844	228,265	1,132,839
	ABATEMENT FEE	0	0	0	4,428
	DONATED ASSETS	0	0	160,201	0
	ARBITRAGE REBATE	0	0	0	260,632
	CONTRIBUTED ASSETS	0	0	0	9,064,450
49002	MISCELLANEOUS INCOME	5,814	0	1,512	32,560
	TOTAL REVENUE	\$ 29,517,633	\$ 30,131,659	\$ 31,148,543	46,139,694
EXPENSES					
PERSONNEL SERVICES					
	SALARIES & WAGES	\$ 9,065,871	\$ 9,054,343	\$ 8,816,915	10,387,021
	OVERTIME	542,300	374,430	440,966	464,876
52700	WORKER'S COMP. - REGULAR	0	0	0	0
	EMPLOYEE RET. BEN - STATE & SEP	863,221	823,429	803,037	821,082
52810	EMPLOYEE RET.BEN.-FICA	719,631	704,826	693,682	814,872
52820	EMPLOYEE BENEFITS-UI	34,134	33,465	27,487	31,638
52830	EMPLOYEE BENEFITS-MED. INS.	0	8,426	10,761	0
52840	EMPLOYEE BEN. GRP. LIFE	0	0	0	0
52940	RETIREMENT HEALTH - STATE	27,819	23,816	30,448	33,886
52950	EMPLOYEE BEN.-HEALTH INS.	1,224,556	1,393,122	1,439,029	1,568,933
52960	EMPLOYEE BEN.-PRESCRIPTIONS	0	0	0	0
52970	EMPLOYEE BENEFITS-DENTAL	0	0	0	0
52980	EMPLOYEE BENEFITS-VISION	0	0	0	0
52990	EMPLOYEE BEN-DISABILITY INS.	35,771	29,499	22,456	26,197
54540	WORKERS COMP - ADMIN. COSTS	0	0	0	0
54770	SUPP. PENSION - RETIREES	0	0	0	0
54950	HEALTH INSURANCE-RETIREES	0	4,425	4,393	1,646
55700	WORKERS COMP- OLD CLAIMS	370,879	307,292	187,227	152,662
	TOTAL PERSONNEL SERVICES	12,884,182	12,757,073	12,476,401	14,302,813
59000	SALARY REIMBURSEMENT	(402,293)	(345,085)	(461,157)	(627,818)
59001	FRINGE REIMBURSEMENT	(165,839)	(154,737)	(221,271)	(300,072)
	NET PERSONNEL SERVICES	12,316,050	12,257,251	11,793,973	13,374,923
OPERATING SUPPLIES/EXPENSES					
52610	MEDICAL SVCS.	580	720	3,959	8,220
52640	BLDG. & GRND. MAINT.	97,012	56,898	81,005	98,863

Narragansett Bay Commission
Four Year Comparison

Schedule WEE-3

ACCT. #	BUDGET ACCOUNT DESCRIPTION	FY 1999 ACTUAL	FY 2000 ACTUAL	FY 2001 ACTUAL	FY 2002 ACTUAL
52641	SLUDGE LOADING/DISPOSAL	1,706,134	1,959,639	1,960,091	1,901,367
52642	TRASH/GRIT REMOVAL	80,659	103,931	100,921	116,485
53200	BAD DEBT EXPENSE	79,007	0	0	206,109
53210	POSTAGE	98,881	121,109	115,076	123,777
53220	TELEPHONE & TELEGRAPH	90,466	86,527	101,542	138,807
53230	OFFICE EXPENSE	46,932	55,354	44,478	93,949
53240	DUES & SUBSCRIPTIONS	41,303	34,500	32,904	29,954
53250	FREIGHT, CART. & EXP.	8,503	27,690	36,343	40,171
53260	INSURANCE	180,351	291,123	388,628	422,341
53261	INSURANCE-VEHICLES	0	0	0	0
53270	CENTRAL PHONE SVCS.	46,209	37,151	39,395	22,965
53280	CENTRAL STORAGE CHARGE	0	0	0	0
53310	PRINTING & BINDING	54,825	77,301	95,348	85,396
53320	ADVERTISING	13,809	16,646	13,739	17,355
53410	MILEAGE ALLOWANCE	4,449	1,970	2,721	2,572
53420	OUT-OF-STATE TRAVEL	42,006	35,703	36,029	49,026
53510	AUTOMOTIVE MAINTENANCE	119,618	101,571	102,706	126,859
53610	REPAIR-BLDG & STRUCTURE	555,894	600,978	710,368	625,092
53611	INCINERATOR	132,997	295,653	183,699	228,395
53620	REPAIR-HIGHWAY & WALKS	3,760	6,424	2,127	4,380
53630	EQUIPMENT MAINTENANCE AGREE	281,431	259,365	294,233	363,142
53640	GENERAL REPAIRS	0	0	0	18,878
53810	RENTAL-OUTSIDE PROPERTY	468,801	389,559	522,942	180,687
53820	RENTAL- EQUIPMENT	20,273	26,277	23,618	17,746
53830	RENTAL- CLOTHING	33,537	34,927	32,022	61,595
54010	KEROSENE	98	488	4,976	0
54020	FUEL OIL #2	7,874	14,873	8,733	231
54021	FUEL OIL #2 - INCINERATOR	5,552	12,252	12,633	9,967
54060	FUEL-GAS	144,275	99,410	236,957	174,105
54061	FUEL- GAS - INCINERATOR	237,367	133,292	663,952	427,954
54090	ELECTRICITY	1,652,730	1,783,145	2,164,899	1,546,871
54110	WATER	95,500	57,921	53,728	67,872
54200	CLOTHING & CLOTHING MAT.	15,681	21,313	17,842	23,625
54210	SAFETY EQUIPMENT	15,161	13,540	20,074	17,005
54310	LANDFILL EXPENSE	0	0	0	0
54320	SPECIAL EDUC. SUPP. & EXPENSES	14,024	5,915	11,121	10,470
54330	HH,LAUND. & CHEMICALS	11,533	6,774	10,448	20,826
54332	CHEM-CHLORINE/HYPOCHLORITE	497,208	220,626	224,381	352,196
54333	CHEM-FERRIC	0	0	0	0
54334	CHEM-LIME	11,357	9,570	14,387	20,536
54335	CHEM-POLYMER	176,141	73,651	82,557	100,662
54336	CHEM-POTASSIUM	7,404	0	0	0
54337	CHEM-SODIUM BISULFITE	22,382	90,902	95,826	49,986
54340	MEDICAL, SURG. AND LAB.	99,031	120,508	116,730	145,525
54360	HIGHWAY & LANDSCAPE	4,758	4,273	2,942	2,242
54370	BLDG. & MACH. SUPPLIES	106,535	81,123	113,592	148,678
54371	INCINERATOR	3,971	894	2,209	3,491
54380	CENTRAL SERVICES	0	0	0	0
54410	EDUCATIONAL SUPP. & EXP.	59,011	44,898	93,707	80,231
54420	COMPUTER SUPPLIES	68,472	104,345	98,190	318,824
54530	PUBLIC PROJ FIN MGMT CHARGE	0	0	0	0
54550	OTHER OPERATING SUPP.	6,123	11,273	5,379	1,810
54590	MISCELLANEOUS EXPENSE	3,809	19,221	2,527	4,168
55820	EDUCATION SCHOOL AIDE	350	0	550	8,435
55850	SLUDGE ADJUSTMENT FACTOR	0	0	0	0

Narragansett Bay Commission
Four Year Comparison

Schedule WEE-3

ACCT. #	BUDGET ACCOUNT DESCRIPTION	FY 1999 ACTUAL	FY 2000 ACTUAL	FY 2001 ACTUAL	FY 2002 ACTUAL
56210	LANDFILL CLOSURE	182,301	3,427	90	0
57600	EQUIP LOSSES-CASUALTY THEFT	5,540	108,767	3,020	117,486
58930	RESIDENTIAL REFUNDS	0	0	0	0
58935	NON RESIDENTIAL REFUNDS	0	0	0	0
58960	INDIRECT COSTS	31,710	14,567	0	0
58970	INDIRECT OVERHEAD ADJUST.	0	0	0	0
59002	CONSTR. IN PROGRESS RECL.	0	0	0	0
<i>TOTAL OPERATING SUPP. & EXP.</i>		7,693,337	7,677,982	8,985,343	8,637,327
<i>SPECIAL SERVICES</i>					
52600	REGULATORY EXPENSE	75,240	81,394	98,080	108,648
52620	ARCHITECT/ENG. SERVICES	48,446	15,784	2,645	750
52630	LECTURES/ED./PROF. SVCS.	5,125	6,750	0	198
52650	SECURITY SERVICES	25,098	27,207	29,393	17,804
52660	LEGAL SERVICES	112,090	112,444	158,349	138,136
52670	MGMT/AUDIT SERVICES	54,763	1,234,274	1,268,885	1,428,847
52680	SPECIAL CLERICAL SERVICES	93,792	70,869	41,882	14,555
52690	ALL OTHER SPECIAL SERVICES	515,464	616,457	840,296	348,876
<i>TOTAL SPECIAL SERVICES</i>		930,019	2,165,179	2,439,530	2,057,814
<i>CAPITAL OUTLAYS</i>					
16200	LANDFILL	0	0	0	0
16510	AUTOMOTIVE EQUIP.	11,742	814	47,292	26,263
16520	BLDG. & PLANT EQUIP.	4,729	91,567	72,300	205,879
16530	CONSTRUCTION EQUIP.	0	11,960	0	0
16540	ED. AND REC. EQUIP.	0	0	0	0
16570	LABORATORY EQUIP.	38,993	38,981	4,515	34,585
16580	OFFICE FURN & EQUIP/COMPUTER	491,191	178,519	24,999	424,059
16590	OTHER EQUIP.	11,965	25,762	5,415	6,940
16610	BUILDING & OTHER STRUCT.	0	28,485	0	15,740
16630	IMP.-NOT BLDG OR STRUCT.	0	0	0	14,950
19300	REPLACEMENT RESERVE	283,835	340,304	449,935	422,845
PRIOR YEAR DEBT COVERAGE					(1,151,261)
<i>TOTAL CAPITAL OUTLAYS</i>		842,455	716,392	604,456	-
<i>DEBT SERVICE</i>					
54430	EXPENSES FOR BONDS & NOTES	17,590	1,600	3,250	2,500
54440	EXPENSES FOR BONDS & NOTES-		28,387	0	0
57010	AMORTIZATION	123,002	122,780	131,095	149,406
57500	DEPRECIATION	4,484,431	4,909,548	5,256,974	5,699,783
57910	INTEREST	2,853,702	2,752,805	2,563,511	2,877,973
57920	PRINCIPAL	0	0	0	0
58920	INTEREST - LATE PMT.	0	0	0	0
58940	ARBITRAGE EXPENSE	35,424	0	17,518	0
58990	OTHER	0	563	0	0
<i>TOTAL DEBT SERVICE</i>		7,514,149	7,815,682	7,972,348	8,729,662
TOTAL EXPENSES		\$ 29,296,009	\$ 30,632,486	\$ 31,795,650	\$ 32,799,726
NET INCOME		\$ 221,624	\$ (500,827)	\$ (647,107)	\$ 13,339,968

Narragansett Bay Commission
Rate Year

Schedule WEE-4

Acct. #	Account Description	Adjusted Test Year	Rate Year Adjustments	Rate Year
Revenue				
41000	FLAT FEES RESIDENTIAL	\$ 6,165,839	\$ 1,533,407	\$ 7,699,246
41100	MEASURED FEE - RESIDENTIAL	11,930,258	3,015,719	14,945,977
41501	FLAT FEES COMMERCIAL	3,459,797	858,030	4,317,827
41502	FLAT FEES INDUSTRIAL	466,426	188,008	654,434
41510	MEASURED FEE - COMMERCIAL	9,580,646	2,227,031	11,807,677
41511	MEASURED FEE - INDUSTRIAL	1,646,572	600,300	2,246,872
42000	DISCHARGE PERMIT FEES	861,821	222,872	1,084,693
42500	CONNECTION PERMIT FEES	51,450	14,706	66,156
43000	BOD/TSS SURCHARGE	116,088	30,810	146,898
43500	SEPTAGE INCOME	597,696	143,537	741,233
44502	MISCELLANEOUS OPERATING INCOME	1,883	-	1,883
45100	INTEREST INCOME	244,713	-	244,713
45500	LATE CHARGE PENALTY	470,674	-	470,674
46500	ENVIRONMENTAL ENFORCEMENT	-	-	-
47000	REIMBURSED COLLECTION COSTS	16,981	-	16,981
47500	GRANT	-	-	-
	ABATEMENT FEE	4,428	-	4,428
	ARBITRAGE REBATE	-	-	-
49005	CAPITAL CONTRIBUTIONS	-	-	-
49002	MISCELLANEOUS INCOME	1,521	-	1,521
	<i>Total Revenue</i>	35,616,793	8,834,420	44,451,213
Expenses				
Personnel Services				
	SALARIES & WAGES	10,338,378	844,702	11,183,080
	OVERTIME	464,876	14,644	479,520
	EMPLOYEE RET. BEN - STATE & SEP	819,539	279,921	1,099,460
52810	EMPLOYEE RET.BEN.-FICA	812,577	60,666	873,243
52820	EMPLOYEE BENEFITS-UI	31,638	-	31,638
52940	RETIREMENT HEALTH - STATE	33,886	13,234	47,120
52950	EMPLOYEE BEN.-HEALTH INS.	1,566,185	699,695	2,265,880
52990	EMPLOYEE BEN-DISABILITY INS.	26,197	10,546	36,743
54950	HEALTH INSURANCE-RETIRES	1,646	-	1,646
55700	WORKERS COMP-OLD CLAIMS	152,662	-	152,662
	<i>Total Personnel Services</i>	14,247,584	1,923,409	16,170,993
59000	SALARY REIMBURSEMENT	(627,818)	(268,827)	(896,645)
59001	FRINGE REIMBURSEMENT	(300,072)	(87,817)	(387,889)
	<i>Net Personnel Services</i>	13,319,694	1,566,765	14,886,459
Supplies & Expense				
52610	MEDICAL SVCS.	8,220	-	8,220
52640	BLDG. & GRND. MAINT.	98,863	-	98,863
52641	SLUDGE LOADING/DISPOSAL	1,901,367	(155,106)	1,746,261
52642	TRASH/GRIT REMOVAL	116,485	95,955	212,440
53200	BAD DEBT EXPENSE	206,109	-	206,109
53210	POSTAGE	123,777	10,922	134,699
53220	TELEPHONE & TELEGRAPH	158,214	-	158,214
53230	OFFICE EXPENSE	93,249	-	93,249

Narragansett Bay Commission
Rate Year

Schedule WEE-4

Acct. #	Account Description	Adjusted Test Year	Rate Year Adjustments	Rate Year
53240	DUES & SUBSCRIPTIONS	29,954	-	29,954
53250	FREIGHT, CART. & EXP.	40,104	-	40,104
53260	INSURANCE	394,686	170,264	564,950
53270	CENTRAL PHONE SVCS.	6,065	-	6,065
53310	PRINTING & BINDING	85,396	-	85,396
53320	ADVERTISING	17,355	-	17,355
53410	MILEAGE ALLOWANCE	2,572	-	2,572
53420	OUT-OF-STATE TRAVEL	48,501	-	48,501
53510	AUTOMOTIVE MAINTENANCE	126,859	-	126,859
53610	REPAIR-BLDG & STRUCTURE	625,092	20,387	645,479
53611	INCINERATOR	228,395	7,521	235,916
53620	REPAIR-HIGHWAY & WALKS	4,380	-	4,380
53630	EQUIPMENT MAINTENANCE AGREE	363,142	108,309	471,451
53640	GENERAL REPAIRS	18,878	-	18,878
53810	RENTAL-OUTSIDE PROPERTY	180,687	(178,580)	2,107
53820	RENTAL- EQUIPMENT	17,746	-	17,746
53830	RENTAL- CLOTHING	44,550	-	44,550
54020	FUEL OIL #2	231	-	231
54021	FUEL OIL #2 - INCINERATOR	9,967	-	9,967
54060	FUEL-GAS	174,105	20,227	194,332
54061	FUEL- GAS - INCINERATOR	427,954	(106,951)	321,003
54090	ELECTRICITY	1,904,759	379,871	2,284,630
54110	WATER	67,872	-	67,872
54200	CLOTHING & CLOTHING MAT.	23,625	-	23,625
54210	SAFETY EQUIPMENT	17,005	-	17,005
54320	SPECIAL EDUC. SUPP. & EXPENSES	-	-	-
54330	HH,LAUND. & CHEMICALS	20,826	-	20,826
54332	CHEM-CHLORINE/HYPOCHLORITE	352,196	-	352,196
54334	CHEM-LIME	20,536	-	20,536
54335	CHEM-POLYMER	100,662	-	100,662
54337	CHEM-SODIUM BISULFITE	49,986	-	49,986
54340	MEDICAL, SURG. AND LAB.	145,525	-	145,525
54360	HIGHWAY & LANDSCAPE	2,242	-	2,242
54370	BLDG. & MACH. SUPPLIES	148,052	(33,588)	114,464
54371	INCINERATOR	3,491	-	3,491
54410	EDUCATIONAL SUPP. & EXP.	79,231	-	79,231
54420	COMPUTER SUPPLIES	313,881	-	313,881
54550	OTHER OPERATING SUPP.	1,810	-	1,810
54590	MISCELLANEOUS EXPENSE	4,168	-	4,168
55820	EDUCATION SCHOOL AIDE	525	-	525
57600	EQUIP LOSSES-CASUALTY THEFT	-	-	-
<i>Total Operating Supplies & Expense</i>		8,809,295	339,230	9,148,525
Special Services				
54430	EXPENSES FOR BONDS & NOTES	2,500	-	2,500
52600	REGULATORY EXPENSE	108,648	42,847	151,495
52620	ARCHITECT/ENG. SERVICES	750	-	750
52630	LECTURES/ED./PROF. SVCS.	198	-	198
52650	SECURITY SERVICES	17,804	-	17,804
52660	LEGAL SERVICES	138,136	(8,951)	129,185
52670	MGMT/AUDIT SERVICES	1,428,847	311,324	1,740,171
52680	SPECIAL CLERICAL SERVICES	14,555	(1,322)	13,233
52690	ALL OTHER SPECIAL SERVICES	208,273	-	208,273
	STAR PROJECT	-	308,242	308,242
<i>Total Special Services</i>		1,919,711	652,140	2,571,851

Narragansett Bay Commission
Rate Year

Schedule WEE-4

Acct. #	Account Description	Adjusted Test Year	Rate Year Adjustments	Rate Year
Capital Outlays				
16200	LANDFILL	-	-	
16510	AUTOMOTIVE EQUIP.	26,263	101,737	128,000
16520	BLDG. & PLANT EQUIP.	205,879	313,771	519,650
16530	CONSTRUCTION EQUIP.	-	-	-
16540	ED. AND REC. EQUIP.	-	-	-
16570	LABORATORY EQUIP.	34,585	116,415	151,000
16580	OFFICE FURN & EQUIP/COMPUTER	424,059	174,641	598,700
16590	OTHER EQUIP.	6,940	(6,940)	-
16610	BUILDING & OTHER STRUCT.	15,740	109,260	125,000
16630	IMP.-NOT BLDG OR STRUCT.	14,905	(14,905)	-
19300	REPLACEMENT RESERVE	422,845	(52,845)	370,000
	PRIOR YEAR DEBT COVERAGE	(1,151,216)	(741,134)	(1,892,350)
	<i>Total Capital Outlays</i>	-	-	-
Depreciation & Amortization				
57010	AMORTIZATION	9,690	-	9,690
57500	DEPRECIATION	-	-	-
	<i>Total Depreciation & Amortization</i>	9,690	-	9,690
	<i>Total Operating Expenses</i>	24,058,390	2,558,135	26,616,525
Debt Service				
	DEBT COVERAGE	1,801,118	5,499,701	7,300,819
57910	INTEREST	2,877,973	(2,877,973)	-
	PRINCIPAL	4,326,500	21,198,284	25,524,784
	CARRY FORWARD FROM 2003		(2,025,910)	(2,025,910)
	<i>Total Debt Service</i>	9,005,591	21,794,102	30,799,693
	<i>Total Expenses</i>	33,063,981	24,352,236	57,416,218
	<i>Net Operating Income</i>	495,960	365,283	861,243
		33,559,941	24,717,520	58,277,461
	<i>Net Income</i>	\$ 2,056,852	\$ (15,883,100)	\$ (13,826,248)

-31.1%

Narragansett Bay Commission
Insignificant Accounts Analysis

Schedule WEE-5

Acct. #	Account Description	Adjusted Test Year	2001	2000
Revenue				
44502	MISCELLANEOUS OPERATING INCOME	\$ 1,883	\$ 278,130	\$ 147,890
47000	REIMBURSED COLLECTION COSTS	16,981	-	-
	ABATEMENT FEE	4,428	-	-
49002	MISCELLANEOUS INCOME	1,521	1,512	-
		<u>\$ 24,813</u>	<u>\$ 279,642</u>	<u>\$ 147,890</u>
Expenses				
52820	EMPLOYEE BENEFITS - UI	\$ 31,638	\$ 27,487	\$ 33,465
54950	HEALTH INSURANCES - RETIREES	1,646	4,393	4,425
52610	MEDICAL SVCS.	8,220	3,959	720
52640	BLDG. & GRND. MAINT.	98,863	81,005	56,898
53230	OFFICE EXPENSE	93,249	44,478	55,354
53240	DUES & SUBSCRIPTIONS	29,954	32,904	34,500
53250	FREIGHT, CART. & EXP.	40,104	36,343	27,690
53270	CENTRAL PHONE SVCS.	6,065	39,395	37,151
53310	PRINTING & BINDING	85,396	95,348	77,301
53320	ADVERTISING	17,355	13,739	16,646
53410	MILEAGE ALLOWANCE	2,572	2,721	1,970
53420	OUT-OF-STATE TRAVEL	48,501	36,029	35,703
53620	REPAIR-HIGHWAY & WALKS	4,380	2,127	6,424
53640	GENERAL REPAIRS	18,878	-	-
53820	RENTAL- EQUIPMENT	17,746	23,618	26,277
53830	RENTAL- CLOTHING	44,550	32,022	34,927
54020	FUEL OIL #2	231	8,733	14,873
54021	FUEL OIL #2 - INCINERATOR	9,967	12,633	12,252
54110	WATER	67,872	53,728	57,921
54200	CLOTHING & CLOTHING MAT.	23,625	17,842	21,313
54210	SAFETY EQUIPMENT	17,005	20,074	13,540
54330	HH,LAUND. & CHEMICALS	20,826	10,448	6,774
54334	CHEM-LIME	20,536	14,387	9,570
54360	HIGHWAY & LANDSCAPE	2,242	2,942	4,273
54371	INCINERATOR	3,491	2,209	894
54410	EDUCATIONAL SUPP. & EXP.	79,231	93,707	44,898
54550	OTHER OPERATING SUPP.	1,810	5,379	11,273
54590	MISCELLANEOUS EXPENSE	4,168	2,527	19,221
55820	EDUCATION SCHOOL AIDE	525	550	-
54430	EXPENSES FOR BONDS & NOTES	2,500	3,250	1,600
52620	ARCHITECT/ENG. SERVICES	750	2,645	15,784
52630	LECTURES/ED./PROF. SVCS.	198	-	6,750
52650	SECURITY SERVICES	17,804	29,393	27,207
57010	AMORTIZATION	9,690	131,095	122,780
		<u>\$ 831,588</u>	<u>\$ 887,110</u>	<u>\$ 840,374</u>

Narragansett Bay Commission
Expense Analysis - Three Year Average

Schedule WEE-6

Account	Account Description	FY 2000	FY 2001	FY 2002	AVERAGE
53610	Repair -Bldg. & Structure	600,978	710,368	625,092	\$ 645,479
53611	Incinerator	295,653	183,699	228,395	\$ 235,916
54370	Bldg. & Machine Supplies	81,123	113,592	148,678	\$ 114,464

**Narragansett Bay Commission
Salaries & Payroll Accounts**

Schedule WEE-7

Total Salary

Total Salary Rate year	\$ 11,183,080
Salary Adjusted Test year	10,338,378
Rate year Adjustment	<u>\$ 844,702</u>

Salary and Fringe Reimbursement

	Salary Reimb Budget 2003	2003 Budget Salary	%	Rate Year Salary	Salary Reimb Rate Year 2003	Adjusted TY	Rate Year Adjustment
21	\$ 36,628				\$ 37,782		
22	561,150	577,065	97%	623,479	606,283		
24	20,000				20,630		
32	15,000				15,473		
55	40,000				41,260		
44	167,872	609,024	28%	635,672	175,217		
	<u>\$ 842,653</u>	Salary Reimbursement (Acct 59000)			896,645	\$ 627,818	\$ 268,827
		Fringe Percentage			43.26%		
		Fringe Reimbursement (Acct 59001)			<u>\$ 387,889</u>	<u>\$ 300,072</u>	<u>\$ 87,817</u>

Overtime

Adjusted Test year OT	\$ 464,876
Increase by COLA	1,0315
Rate year OT	<u>479,520</u>
Adjusted Test year OT	464,876
Rate Year adjustment	<u>\$ 14,644</u>

FICA (Acct 52810)

	Total Salary		
Medicare Salary**	\$ 11,662,600	0.0145	\$ 169,107.70
Over limit*	305,579		
FICA Salary	<u>\$ 11,357,021</u>	0.062	<u>704,135</u>
Rate year Fica		0.0765	873,243
Adjusted Test year fica			<u>812,577</u>
Rate year adjustment			<u>\$ 60,666</u>

*Based on \$84,900

** Includes OT

Pension

Union Salary	4,712,043	0.096	\$ 452,356
Non-union Salary	6,471,037	0.10	<u>647,104</u>
Rate year level			1,099,460
Adjusted Test Year			<u>819,539</u>
Rate year Adjustment			<u>\$ 279,921</u>

Union pension contribution increased from 7.68% to 9.6%

**Narragansett Bay Commission
Salaries & Payroll Accounts**

Schedule WEE-7

Retiree Health (Acct #52940)

Union Salary	4,712,043	0.01	\$	<u>47,120</u>
Rate Year level				47,120
Adjusted Test Year level				<u>33,886</u>
Rate year adjustment			\$	<u><u>13,234</u></u>

Disability Insurance (Acct #52990)

Non union Salary	\$	6,471,037
over limit		<u>(24,842)</u>
Subjected to LTD		6,446,196
Rate Year .57 per \$100 of monthly earnings		36,743
Adjusted test year level		<u>26,197</u>
Rate year adjustment	\$	<u><u>10,546</u></u>

**Narragansett Bay Commission
Health/Dental/Vision**

Schedule WEE-8

		Rate Per	Number of		
		Members	Pay period	Pay periods	Cost
<u>Health Insurance</u>					
HMO	Family	8	335.76	26	\$ 69,838
	Single	1	122.92	26	3,196
PPO	Family	163	407.96	26	1,728,951
	Single	59	149.35	26	229,106
Waiver		19	2,500	1	47,500
		<u>250</u>			
<u>Dental</u>					
	Family*	171	31.03	26	137,959
	Single*	60	11.08	26	17,285
	Waiver	19	110.00	1	2,090
		<u>250</u>			
<u>Vision</u>					
	Family**	190	5.29	26	26,133
	Single**	60	2.45	26	3,822
		<u>250</u>			
			Rate Year	\$	2,265,880
			Adjusted Test Year		1,566,185
			Rate Year Adjustment	\$	699,695

* Rate for the rate year per contract.

** Vision rate effective 2/24/2002 through 3/2004

Blue Cross Rates:					Projected Rates
		1/1/2000	1/1/2001	7/1/2002	7/1/2003
PPO Plan	Family	267.48	288.94	339.97	407.96
	% increase		8%	18%	20%
	Single	95.41	106.28	124.46	149.35
			11%	17%	20%
HMO Plan	Family	219.9	235.94	279.80	335.76
			7%	19%	20%
	Single	77.53	86.83	102.43	122.92
			12%	18%	20%

Narragansett Bay Commission
Expense Analysis - Sludge Loading/ Disposal
(Acct. 52641)

Schedule WEE-9

USAGE		RATE		EXPENSE
Bucklin Point		4,112 DT	6 mos. @ \$365	\$ 750,422
			6 mos. @ \$370	760,702
				<u>1,511,123</u>
 Field's Point				
Ash Disposal	1,910 WT	\$	16.00	30,560
Sludge Disposal	2,810 WT	\$	53.00	148,930
Hauling Fee	2,776 WT	\$	18.60	51,634
Liquid Sludge	8.4498 WT	\$	475.00	4,014
				<u>235,137</u>
Rate Year Sludge Removal				<u>1,746,261</u>
 Test Year Sludge Removal				<u>1,901,367</u>
 Rate Year Adjustment				<u><u>\$ (155,106)</u></u>

Narragansett Bay Commission
Expense Analysis - Trash Grit Removal
(Acct. 52642)

Schedule WEE-10

Test Year Expense- Trash & Grit Removal \$ 116,484

*Adjustment for Increase in Landfill Disposal
fees (R.I. Resource Recovery Corp.)*

Test Year Landfill Expense \$ 92,214

Test Year Rate \$47

FY 2004 Rate \$53

Percent Increase 12.76596%

11,772

Other Rate Year Adjustments

Additional Grit Removal due to Sewer Cleaning Project
(364 tons @ \$54/ton) 19,656

CSO Floatables Control Project Operating Costs:

Floatables Nets (500 Nets /Year @ \$121/net) 60,500

Disposal of nets & collected material (\$53/ton X 76 tons) 4,028

\$ 84,184

84,184

Total Rate Year **212,440**

Test Year 116,484

Rate Year Adjustment \$ 95,956

Narragansett Bay Commission
Expense Analysis - Postage
(Acct. 53210)

Schedule WEE-11

		Expense
<i>Test Year - Postage</i>		\$ 123,777
Test Year postage rate	\$ 0.34	
June 30, 2002 postage rate increase	\$ 0.37	
Percent Increase	8.8%	
<i>Rate Year Adjustment</i>		<u>10,922</u>
<i>Rate Year - Postage</i>		<u><u>\$ 134,699</u></u>

**Narragansett Bay Commission
Expense Analysis - Insurance
(Acct. 53260)**

Schedule WEE-12

TEST YEAR	\$ 422,341	
TEST YEAR ADJUSTMENT	<u>(27,655)</u>	Pollution insurance paid in FY 2002 for two years
ADJUSTED TEST YEAR	<u><u>\$ 394,686</u></u>	

TYPE OF COVERAGE	ADJUSTED TEST YEAR	ACTUALS FY 2003	RATE YEAR*
Commercial Property	\$ 55,302	\$ 83,052	\$ 103,815
Contractor's Equipment	3,419	3,761	4,701
Business Auto	18,781	53,299	66,624
General Liability	44,655	51,670	64,588
Crime Insurance	1,166	1,164	1,455
Fire Insurance (Watercraft)	4,654	5,550	6,938
Workers Compensation	174,672	176,480	176,480
Public Officials E & O	15,801	24,804	31,005
Flood	14,981	15,374	19,218
Umbrella	29,000	39,446	49,308
Pollution	27,655	27,656	34,570
Contractor Utility Bond	100	-	-
TPA	4,500	5,000	6,250
Total Annual Premium	\$ 394,686	\$ 487,256	<u>564,950</u>
Adjusted Test Year			<u>394,686</u>
Rate Year Adjustment			<u><u>\$ 170,264</u></u>

* 25% increase over FY 2003 levels for all items except workers compensation

Narragansett Bay Commission
Expense Analysis - Maintenance Service Agreements
(Account 53630)

Schedule WEE-13

Test Year	\$ 363,142
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Adjustments

Increases:

Bailey Computer	\$ 6,586
Compaq	28,039
LabVantage Solutions	20,000
Perkin Elmer (6 months for new Optima)	16,600
Oracle (new upgrade)	2,609
Levy & Associates	2,940
Atrion/Citrix	7,500
Leeman Labs	3,915
Misc. Increases on other contracts	2,942
Total Increases	<u>91,131</u>

Decreases:

New GL/Purchasing/HR/Payroll	(42,109)
DataStream (MP2)/Hansen migration	(5,961)
Agilent Technologies (MS out)	(4,752)
Total Decreases	<u>(52,822)</u>

New Maintenance Contracts:

Varian Analytical (new ICP)	5,000
Floatables maintenance	65,000
Total New Contracts	<u>70,000</u>

Rate Year Adjustment	108,309
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TOTAL RATE YEAR	\$ 471,451
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Narragansett Bay Commission
Expense Analysis - Rental Outside Property
(Acct 53810)

Schedule WEE-14

Test Year		\$ 180,687
<i>Adjustments</i>		
Rental 459 Promenade	\$ (15,000)	
Rental 235 Promenade	<u>(163,580)</u>	
Rate Year Adjustment		<u>(178,580)</u>
Total Rate Year		\$ 2,107

Narragansett Bay Commission
Expense Analysis - Fuel-Gas
(Acct. 54060)

Schedule WEE-15

		Expense
<hr/>		
<i>Test Year Cost of Gas</i>		
<i>Supply Costs</i>	(201,463 CCF X average rate of \$0.483)	\$ 97,361
<i>Distribution Costs</i>	(185,164 CCF X average rate of \$0.3869)	71,641
<i>Accrual</i>		<u>5,103</u>
<i>Total</i>		174,105
Less: Overaccrual		(5,103)
 <i>Rate Year Cost of Gas</i>		
<i>Rate Year Supply</i>	(201,463 CCF X rate increase of \$0.126 *)	<u>25,330</u>
 <hr/>		
<i>Rate Year Cost of Fuel - Gas</i>		\$ 194,332
		<hr/>

** Adjustment for Increase in Cost of Gas*

Rate Year Supply Rate	\$0.609
Test Year Supply Rate	<u>0.483</u>
<i>Supply Rate Increase</i>	<u><u>\$0.126</u></u>

Narragansett Bay Commission
Expense Analysis - Fuel - Gas - Incinerator
(Acct. 54061)

Schedule WEE-16

	RATE YEAR		
	2004 Ccf Usage	2004 Rates	2004 Total Expense
Select Energy	623,614	0.421000	\$ 262,541
New England Gas	659,750	0.088613	<u>58,462</u>
Total Fuel -Gas -Incinerator			321,003
		Test Year Fuel - Gas -Incinerator	<u>427,954</u>
		Rate Year Adjustment	<u><u>\$ (106,951)</u></u>

Schedule WEE-17

	2000 Kilowatt Hours	2001 Kilowatt Hours	2002 Kilowatt Hours	2004 Kilowatt Hours	Rate Year FY 2004 Rates	FY 2004 Expense
Bucklin Point	7,582,800	7,801,200	7,524,000	7,636,000	0.0911	\$ 695,640
Field's Point	15,935,200	15,884,000	15,566,800	15,795,333	0.0894	1,411,963
Interceptor Maintenance	626,445	703,204	795,202	708,284	0.1136	80,461
Administrative Facilities	145,070	276,205	727,691	905,867	0.1066	96,565
Totals	24,289,515	24,664,609	24,613,693	25,045,484		2,284,630
					Adjusted Test Year	1,904,759
					Rate Year Adjustment	\$ 379,870

Narragansett Bay Commission
Expense Analysis - Regulatory Expense
(Acct. 52600)

Schedule WEE-18

	Expense	
	Test Year	Rate Year
Annual PUC Assessment	\$ 78,866	\$ 88,330
Permits	24,010	24,010
Division charge for Docket 3162	5,772	-
One third of Abbreviated rate case expense	-	12,705
One third of current docket rate case expense	-	26,450
	<u>\$ 108,648</u>	<u>151,495</u>
	Adjusted Test Year	<u>108,648</u>
	Rate Year Adjustment	<u>\$ 42,847</u>

Narragansett Bay Commission
Expense Analysis - Legal Services
(Acct 52660)

Schedule WEE-19

Test Year		\$ 138,136
<i>Adjustments</i>		
Legal Expenses for PUC Docket 3409	<u>(8,951)</u>	
Rate Year Adjustment		<u>(8,951)</u>
Total Rate Year		\$ 129,185

Narragansett Bay Commission
Expense Analysis - Management /Audit Services
(Acct. 52670)

Schedule WEE-20

Expense		
	Test Year	Rate Year
Job position / specification assessments	\$ 2,550	\$ 20,000
Financial Advisor	20,000	20,000
B&E - Docket 3409	16,605	-
Utility Consultant Services	4,933	5,000
Fiscal Audit	24,400	29,500
US Filter	1,287,799	1,361,821
Storm Water Study	69,967	290,000
Strategic Planning	-	10,000
TPA	2,594	3,850
	<u>\$ 1,428,847</u>	<u>1,740,171</u>
Adjusted Test year		<u>1,428,847</u>
Rate Year Adjustment		<u>\$ 311,324</u>

Schedule WEE-21

Test Year	\$ 14,555
<i>Adjustments</i>	
Court Reporter for PUC Docket 3409	<u>(1,322)</u>
Rate Year Adjustment	<u>(1,322)</u>
Total Rate Year	\$ 13,233

Narragansett Bay Commission
Expense Analysis - Sampling, Testing, Analysis of Rivers (STAR) Project
Rate Year 2004

Schedule WEE-22

Type of Expense		Account	Expense
Personnel Costs:			
Positions to be filled:	Assistant EMDA Manager	\$ 46,009	
	Environmental Scientist	34,200	
	Monitoring Tech	30,747	
	Chemist	<u>34,978</u>	
Sub-Total Salaries and Wages			\$ 145,934
FICA		52810	11,164
Health Insurance			46,204
Long-term Disability		52990	632
Retirement Benefits			14,454
Total Personnel Costs			<u>218,388</u>
O & M:			
Additional testing materials in Lab for nutrients, metals, fecal coliform (acid, bottles, etc.)		54340	27,354
Additional sampling supplies EMDA (bottles, etc.)		54340	5,000
Nextel phones (\$500 per field employee)			1,500
Insurance on boat			6,500
Fuel for boat			4,000
Special Services - Contract Lab analysis (trace metals split samples)		52690	25,500
Total O & M			<u>69,854</u>
Capital Outlays:			
Replacement buoy components (2 @ \$10,000 each)			20,000
Total Capital Outlays			<u>20,000</u>
Total Star Project Requirements			\$ 308,242

Narragansett Bay Commission
Expense Analysis - Capital Outlays For Rate Year 2004

Schedule WEE-23

	Rate Year
Administration and Finance	
Information Technology	
Average of 3 year plan	\$ 598,700
Subtotal IT	598,700
Operations and Engineering	
Interceptor Maintenance and Construction	
Replace sewer bucket machine	60,000
Replacement of Unit 7	70,000
Replacement of Unit 31	30,000
Replacement of Unit 9	35,000
Sub-total Interceptor Maintenance	195,000
Field's Point WWTF	
Repairs to roofs, tanks	25,000
PSPS I Sludge pump and motor assembly	25,000
Scum pump and motor	25,000
Replacement of Screwlift flights with Marathon Drives at screwlift building	30,000
RSPS II WAS pump cartridge	11,000
RSPS II RAS pump cartridge	25,000
Replace mammoth unit chiller COB	25,000
GT motor & gearbox for drives	45,000
PSPS II Turntable assem. Tanks	50,000
RSPS II turntables assem. Clarif.	100,000
Repair of ash crane	30,000
Replace autocar w/ dumpsters	100,000
Replace PM truck	25,000
Replace 3 old cushmans	20,000
Replace unit 444 chevy pickup	23,000
ESPS Repairs and Improvements	100,000
Replace roof Gravity Thickner building	30,000
Screwlift pads for pumps - repair cracks	25,000
Aeration tanks - repair cracks in expansion joints	38,000
Sub-total Field's Point	752,000
Bucklin Point WWTF	
Chlorine bldg. Roof rehab.	12,000
Digester #1 handrails	24,000
Digester #2 handrails	24,000
Digester contl.bldg. Roof rehab.	10,000
Replace electrician's truck	30,000
Subtotal Bucklin Point	100,000
Planning, Policy and Regulation	
Laboratory	
GC/MS	80,000
Purge and Trap	15,000
Replacement of Water Purifier	6,000
Subtotal Laboratory	101,000

Narragansett Bay Commission
Expense Analysis - Capital Outlays For Rate Year 2004

Schedule WEE-23

EMDA

Replacement of 1996 Ford Ranger	25,000
Replacement of 1996 Chevy Astro	25,000
Replace 1986 Bronco with electric cart	6,000
2 Replacement samplers for WWTFs	11,000
Real-time BOD Analyzer for Field's Point	35,000
YSI sonde with logger for WWTFs	10,000
Dishwasher for BP Lab	5,000
2 Samplers for Pump Stations	11,000
2 Replacement portable samplers for SIU monitoring	6,000
PH Triggered module for sampler	3,500
2 Replacement gas meters	2,650
1 new sampler for septage station	5,500
<i>Subtotal EMDA</i>	145,650

TOTALS	\$	1,892,350
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Narragansett Bay Commission
Capital Improvements Project Summary
(in 000's)

Schedule WEE-24

Projected Expenditures								
Project Costs	Pre-FY 2003	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	Total
Program Planning	894	424	225	125	125	125	-	1,918
A&E/Professional	15,915	1,726	5,023	1,475	1,375	375	-	25,889
Land Acquisition	1,398	1,050	1,150	-	-	-	-	3,598
Site Improvement	-	-	-	-	-	-	-	-
Construction	8,830	87,936	97,645	78,312	75,482	24,400	9,790	382,395
Contingency	30	8,244	9,214	7,250	7,068	1,960	800	34,566
Other	7,035	3,343	2,981	2,873	2,871	2,288	1,000	22,391
Total Project Costs	34,102	102,723	116,238	90,035	86,921	29,148	11,590	470,757

Narragansett Bay Commission
TECP/Debt Financing Schedule
(First Southwest)

Schedule WEE-25

INDENTURE REQUIREMENTS
With Revenue Adjustment

OPERATING REVENUES

User Fees	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923
Permit and Constructions Fees	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530
Industrial Pretreatment	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704
Septage Income	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833
Abatement Fees	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Miscellaneous Revenue	\$536,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044
BOD/TSS Surcharge	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759
Revenue Adjustment	-	7,218,441	14,062,305	22,315,899	28,131,090	31,951,955	34,603,074	36,882,008	37,507,157
Compounded Growth on Revenue Adjustment	-	-	-	-	-	-	-	-	-

Total Operating Revenues	\$44,221,793	\$50,915,234	\$57,759,098	\$66,012,692	\$71,827,883	\$75,648,748	\$78,299,867	\$80,578,801	\$81,203,950
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NONOPERATING REVENUES

Interest Income	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000
Late Charge Penalty	520,000	625,000	625,000	625,000	625,000	625,000	625,000	625,000	625,000
Grant Revenue	1,465,608	-	-	-	-	-	-	-	-
Miscellaneous	362,678	-	-	-	-	-	-	-	-

Total NonOperating Revenues	\$ 2,628,286	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000
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DISPOSITION OF REVENUES (Section 13)

A. OPERATING EXPENSES

Personnel Services	\$ 14,549,429	\$ 14,895,290	\$ 15,491,102	\$ 16,110,746	\$ 16,755,175	\$ 17,425,383	\$ 18,122,398	\$ 18,847,294	\$ 19,601,185
Special Services	2,696,987	2,571,850	2,661,865	2,755,030	2,851,456	2,951,257	3,054,551	3,161,460	3,272,111
Operating Supplies and Services	8,755,974	9,183,529	9,504,953	9,837,626	10,181,943	10,538,311	10,907,152	11,288,902	11,684,014
Total Operating Expenses	\$ 26,002,390	\$ 26,650,669	\$ 27,657,919	\$ 28,703,402	\$ 29,788,574	\$ 30,914,950	\$ 32,084,100	\$ 33,297,656	\$ 34,557,310
Pledged Revenue/Net Revenue	\$20,847,689	\$25,169,565	\$31,006,179	\$38,214,291	\$42,944,309	\$45,638,798	\$47,120,766	\$48,186,145	\$47,551,640

B. DEBT SERVICE

SRF - Existing	10,292,405	11,113,187	10,979,763	11,260,376	11,422,020	11,403,033	10,901,503	10,906,666	10,407,012
SRF - Proposed	3,014,130	6,660,743	10,413,244	14,503,500	18,860,150	23,193,480	26,795,110	27,642,250	27,634,300
Total SRF Bond Debt Service:	13,306,535	17,773,930	21,393,007	25,763,876	30,282,170	34,596,513	37,696,613	38,548,916	38,041,312
Open Market - Existing	-	-	-	-	-	-	-	-	-
Open Market - Proposed	-	-	-	-	-	-	-	-	-
Total Open Market Bond Debt Service:	-	-	-	-	-	-	-	-	-
Total Bond Debt Service:	13,306,535	17,773,930	21,393,007	25,763,876	30,282,170	34,596,513	37,696,613	38,548,916	38,041,312

C. DEBT SERVICE - TECP

	899,791	2,361,722	3,411,936	4,807,557	4,073,277	1,914,525	-	-	-
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D. TOTAL DEBT SERVICE

	14,206,326	20,135,652	24,804,943	30,571,433	34,355,447	36,511,038	37,696,613	38,548,916	38,041,312
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EXCESS OF REVENUES OVER M&O AND DS REQUIREMENTS	\$6,641,363	\$5,033,913	\$6,201,236	\$7,642,858	\$8,588,862	\$9,127,760	\$9,424,153	\$9,637,229	\$9,510,328
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Debt Coverage Ratio - TOTAL ALL FIXED RATE DEBT	1.57	1.42	1.45	1.48	1.42	1.32	1.25	1.25	1.25
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Debt Coverage Ratio - TOTAL ALL DEBT	1.47	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
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Debt Service Coverage Required	3,551,581	5,033,913	6,201,236	7,642,858	8,588,862	9,127,760	9,424,153	9,637,229	9,510,328
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TOTAL REVENUE REQUIREMENT	43,760,297	51,820,234	58,664,098	66,917,692	72,732,883	76,553,748	79,204,867	81,483,801	82,108,950
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Capital Projects Summary	102,723,000	116,238,000	90,035,000	86,921,000	29,148,000	11,590,000	0	0	0
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Construction Financing Plan

Sources of Funds

New TECP	35,991,631	49,889,174	27,850,401	23,627,557	0	0	0	0	0
Bay Bonds	5,200,000	0	0	0	0	0	0	0	0
SRF Bonds	57,000,000	60,000,000	60,000,000	60,000,000	60,000,000	60,000,000	47,865,000	0	0
Open Market Bonds	0	0	0	0	0	0	0	0	0
Grants	1,659,392	2,500,000	0	0	0	0	0	0	0
Surplus Revs from Pre Year	5,564,392	6,641,363	5,033,913	6,201,236	7,642,858	8,588,862	9,127,760	9,424,153	9,637,229
Total Sources	105,415,415	119,030,537	92,884,314	89,828,793	67,642,858	68,588,862	56,992,760	9,424,153	9,637,229

Uses fo Funds

Operating Capital	1,837,415	1,892,537	1,949,314	2,007,793	2,068,027	2,130,068	2,193,970	2,259,789	2,327,582
Capital Improvements	102,723,000	116,238,000	90,035,000	86,921,000	29,148,000	11,590,000	0	0	0
TECP Take Out	0	0	0	0	35,526,831	53,968,794	47,863,137	0	0
Debt Issuance Expense	855,000	900,000	900,000	900,000	900,000	900,000	717,975	0	0
Total Uses	105,415,415	119,030,537	92,884,314	89,828,793	67,642,858	68,588,862	50,775,082	2,259,789	2,327,582

**Narragansett Bay Commission
OMB/Debt Financing Model (First Southwest)**

Schedule WEE-26

**INDENTURE REQUIREMENTS
With Revenue Adjustment**

	2003	2004	2005	2006	2007	2008	2009	2010	2011
OPERATING REVENUES									
User Fees	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923
Permit and Constructions Fees	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530
Industrial Pretreatment	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704
Septage Income	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833
Abatement Fees	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Miscellaneous Revenue	\$536,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044
BOD/TSS Surcharge	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759
Revenue Adjustment	-	9,356,738	19,560,222	28,822,135	34,823,034	36,760,449	37,430,686	38,644,406	39,267,556
Compounded Growth on Revenue Adjustment	-	-	-	-	-	-	-	-	-
Total Operating Revenues	\$44,221,793	\$53,053,531	\$63,257,015	\$72,518,928	\$78,519,827	\$80,457,242	\$81,127,479	\$82,341,199	\$82,964,349
NONOPERATING REVENUES									
Interest Income	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000
Late Charge Penalty	520,000	625,000	625,000	625,000	625,000	625,000	625,000	625,000	625,000
Grant Revenue	1,465,608	-	-	-	-	-	-	-	-
Miscellaneous	362,678	-	-	-	-	-	-	-	-
Total NonOperating Revenues	\$ 2,628,286	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000
DISPOSITION OF REVENUES (Section 13)									
A. OPERATING EXPENSES									
Personnel Services	\$ 14,549,429	\$ 14,895,290	\$ 15,491,102	\$ 16,110,746	\$ 16,755,175	\$ 17,425,383	\$ 18,122,398	\$ 18,847,294	\$ 19,601,185
Special Services	2,696,987	2,571,850	2,661,865	2,755,030	2,851,456	2,951,257	3,054,551	3,161,460	3,272,111
Operating Supplies and Services	8,755,974	9,183,529	9,504,953	9,837,626	10,181,943	10,538,311	10,907,152	11,288,902	11,684,014
Total Operating Expenses	\$ 26,002,390	\$ 26,650,669	\$ 27,657,919	\$ 28,703,402	\$ 29,788,574	\$ 30,914,950	\$ 32,084,100	\$ 33,297,656	\$ 34,557,310
Pledged Revenue/Net Revenue	\$20,847,689	\$27,307,862	\$36,504,096	\$44,720,526	\$49,636,253	\$50,447,291	\$49,948,379	\$49,948,543	\$49,312,038
B. DEBT SERVICE									
SRF - Existing	10,292,405	11,113,187	10,979,763	11,260,376	11,422,020	11,403,033	10,901,503	10,906,666	10,407,012
SRF - Proposed	3,014,130	6,660,743	10,413,244	14,431,210	16,762,645	17,429,275	17,524,025	17,520,550	17,512,300
Total SRF Bond Debt Service:	13,306,535	17,773,930	21,393,007	25,691,586	28,184,665	28,832,308	28,425,528	28,427,216	27,919,312
Open Market - Existing	-	-	-	-	-	-	-	-	-
Open Market - Proposed	753,100	4,072,360	7,810,270	10,084,835	11,524,338	11,525,525	11,533,175	11,531,619	11,530,319
Total Open Market Bond Debt Service:	753,100	4,072,360	7,810,270	10,084,835	11,524,338	11,525,525	11,533,175	11,531,619	11,530,319
Total Bond Debt Service:	14,059,635	21,846,290	29,203,277	35,776,421	39,709,003	40,357,833	39,958,703	39,958,835	39,449,631
C. DEBT SERVICE - TECP	-	-	-	-	-	-	-	-	-
D. TOTAL DEBT SERVICE	14,059,635	21,846,290	29,203,277	35,776,421	39,709,003	40,357,833	39,958,703	39,958,835	39,449,631
EXCESS OF REVENUES OVER M&O AND DS REQUIREMENTS	\$6,788,054	\$5,461,572	\$7,300,819	\$8,944,105	\$9,927,251	\$10,089,458	\$9,989,676	\$9,989,709	\$9,862,408
Debt Coverage Ratio - TOTAL ALL FIXED RATE DEBT	1.48	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Debt Coverage Ratio - TOTAL ALL DEBT	1.48	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Debt Service Coverage Required	3,514,909	5,461,572	7,300,819	8,944,105	9,927,251	10,089,458	9,989,676	9,989,709	9,862,408
TOTAL REVENUE REQUIREMENT	43,576,934	53,958,531	64,162,015	73,423,928	79,424,827	81,362,242	82,032,479	83,246,199	83,869,349
Capital Projects Summary	102,723,000	116,238,000	90,035,000	86,921,000	29,148,000	11,590,000	0	0	0
Construction Financing Plan									
Sources of Funds									
New TECP	0	0	0	0	0	0	0	0	0
Bay Bonds	5,200,000	0	0	0	0	0	0	0	0
SRF Bonds	57,000,000	60,000,000	60,000,000	60,000,000	23,855,000	4,715,000	0	0	0
Open Market Bonds	36,825,000	50,890,000	28,055,000	23,050,000	0	0	0	0	0
Grants	1,659,392	2,500,000	0	0	0	0	0	0	0
Surplus Revs from Pre Year	<u>5,564,392</u>	<u>6,788,054</u>	<u>5,461,572</u>	<u>7,300,819</u>	<u>8,944,105</u>	<u>9,927,251</u>	<u>10,089,458</u>	<u>9,989,676</u>	<u>9,989,709</u>
Total Sources	106,248,784	120,178,054	93,516,572	90,350,819	32,799,105	14,642,251	10,089,458	9,989,676	9,989,709
Uses fo Funds									
Operating Capital	1,837,415	1,892,537	1,949,314	2,007,793	2,068,027	2,130,068	2,193,970	2,259,789	2,327,582
Capital Improvements	102,723,000	116,238,000	90,035,000	86,921,000	29,148,000	11,590,000	0	0	0
TECP Take Out	0	0	0	0	0	0	0	0	0
Debt Issuance Expense	<u>1,683,563</u>	<u>2,045,025</u>	<u>1,531,238</u>	<u>1,418,625</u>	<u>357,825</u>	<u>70,725</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Uses	106,243,978	120,175,562	93,515,551	90,347,418	31,573,852	13,790,793	2,193,970	2,259,789	2,327,582

Narragansett Bay Commission
Comparative One and Two Year TECP and OMB

Schedule WEE-27

Analysis of Rate Increase Requirements:

	2004 TECP-1 yr	2004-2005 TECP-2 yr	2004 OMB-1 yr	2004-2005 OMB-2 yr
Rate Year Operating Expenses	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525
Less 2003 Carryforward	(4,051,820)	(2,025,910)	(4,051,820)	(2,025,910)
Revenue Requirement before Debt	\$ 22,564,705	\$ 24,590,615	\$ 22,564,705	\$ 24,590,615
Debt Service Payments:				
Principal and interest (sub bonds)	17,773,930	19,583,469	17,773,930	19,583,469
OMB debt service			4,072,360	5,941,315
TECP debt service	2,361,722	2,886,829	-	-
Coverage	5,033,913	6,201,236	5,461,572	7,300,819
	25,169,565	28,671,534	27,307,862	32,825,603
Revenue Requirement	47,734,270	53,262,149	49,872,567	57,416,218
Net Operating Income	716,014	798,932	748,089	861,243
Rate Year Revenue Requirement	\$ 48,450,284	\$ 54,061,081	\$ 50,620,656	\$ 58,277,461
Rate Year Revenue	\$ 44,451,213	\$ 44,451,213	\$ 44,451,213	\$ 44,451,213
(A/B-1) as a percent	9.00%	21.619%	13.88%	31.10%
Cost to Average Residential User		\$249.17		\$268.61

Narragansett Bay Commission
Two Year Average TECP, 4 Automatic Rate Increases
(Alternative 1)

Schedule WEE-28

Analysis of Rate Increase Requirements:

	Two-Year Average TECP-2yr	2006 TECP-3rd yr	2007 TECP-4th yr	2008 TECP-5th yr	2009 TECP-6th yr
Rate Year Operating Expenses	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525
Less 2003 Carryforward	(2,025,910)	-	-	-	-
Revenue Requirement before Debt	\$ 24,590,615	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525
Debt Service Payments:					
Principal and interest (sub bonds)	19,583,469	25,763,876	30,282,170	34,596,513	37,696,613
TECP debt service	2,886,829	4,807,557	4,073,277	1,914,525	-
Coverage	6,201,236	7,642,858	8,588,862	9,127,760	9,424,153
	28,671,534	38,214,291	42,944,309	45,638,798	47,120,766
Revenue Requirement	53,262,149	64,830,816	69,560,834	72,255,323	73,737,291
Net Operating Income	798,932	972,462	1,043,413	1,083,830	1,106,059
Rate Year Revenue Requirement	<u>\$ 54,061,081</u>	<u>\$ 65,803,278</u>	<u>\$ 70,604,247</u>	<u>\$ 73,339,153</u>	<u>\$ 74,843,350</u>
Prior Year Revenue	<u>\$ 44,451,213</u>	<u>\$ 54,061,081</u>	<u>\$ 65,803,278</u>	<u>\$ 70,604,247</u>	<u>\$ 73,339,153</u>
(A/B-1) as a percent	<u>21.62%</u>	<u>21.72%</u>	<u>7.30%</u>	<u>3.87%</u>	<u>2.05%</u>
Cost to Average Residential User	<u>\$249.17</u>	<u>\$303.29</u>	<u>\$325.42</u>	<u>\$338.03</u>	<u>\$344.96</u>

Narragansett Bay Commission
TECP Schedule - All Years, Automatic Rate Increases
(Alternative 2)

Schedule WEE-29

Analysis of Rate Increase Requirements:

	2004	2005	2006	2007	2008	2009
	TECP-1yr	TECP-2nd yr	TECP-3rd yr	TECP-4th yr	TECP-5th yr	TECP-6th yr
Rate Year Operating Expenses	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525
Less 2003 Carryforward	(4,051,820)	-	-	-	-	-
Revenue Requirement before Debt	\$ 22,564,705	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525
Debt Service Payments:						
Principal and interest (sub bonds)	17,773,930	21,393,007	25,763,876	30,282,170	34,596,513	37,696,613
TECP debt service	2,361,722	3,411,936	4,807,557	4,073,277	1,914,525	-
Coverage	5,033,913	6,201,236	7,642,858	8,588,862	9,127,760	9,424,153
	25,169,565	31,006,179	38,214,291	42,944,309	45,638,798	47,120,766
Revenue Requirement	47,734,270	57,622,704	64,830,816	69,560,834	72,255,323	73,737,291
Net Operating Income	716,014	864,341	972,462	1,043,413	1,083,830	1,106,059
Rate Year Revenue Requirement	A \$ 48,450,284	\$ 58,487,045	\$ 65,803,278	\$ 70,604,247	\$ 73,339,153	\$ 74,843,350
Prior Year Revenue	B \$ 44,451,213	\$ 48,450,284	\$ 58,487,045	\$ 65,803,278	\$ 70,604,247	\$ 73,339,153
(A/B-1) as a percent	9.00%	20.72%	12.51%	7.30%	3.87%	2.05%
Cost To Average Residential User	\$223.31	\$269.57	\$303.29	\$325.42	\$338.03	\$344.96

Narragansett Bay Commission
OMB Two Year Average - Subsequent Increases

Schedule WEE-30

Analysis of Rate Increase Requirements:

	2004-2005 OMB-2-year Ave.	2006 OMB year 3	2007 OMB year 4	2008 OMB year 5	2009 OMB year 6
Rate Year Operating Expenses	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525
Less 2003 Carryforward	(2,025,910)				
Revenue Requirement before Debt	\$ 24,590,615	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525
Debt Service Payments:					
Principal and interest (sub bonds)	19,583,469	25,691,586	28,184,665	28,832,308	28,425,528
OMB debt service	5,941,315	10,084,835	11,524,338	11,525,525	11,533,175
TECP debt service	-				
Coverage	7,300,819	8,944,105	9,927,251	10,089,458	9,989,676
	32,825,603	44,720,526	49,636,254	50,447,291	49,948,379
Revenue Requirement	57,416,218	71,337,051	76,252,779	77,063,816	76,564,904
Net Operating Income	861,243	1,070,056	1,143,792	1,155,957	1,148,474
Rate Year Revenue Requirement	\$ 58,277,461	\$ 72,407,107	\$ 77,396,571	\$ 78,219,773	\$ 77,713,378
Prior Year Revenue	\$ 44,451,213	\$ 58,277,461	\$ 72,407,107	\$ 77,396,571	\$ 78,219,773
(A/B-1) as a percentage	31.10%	24.25%	6.89%	1.06%	-0.65%
Cost to Average Residential User	\$268.61	\$333.73	\$356.73	\$360.52	\$358.19

Narragansett Bay Commission
OMB Schedule - All Years

Schedule WEE-31

Analysis of Rate Increase Requirements:

	2004 OMB-1 yr	2005 OMB-2nd yr	2006 OMB-3rd yr	2007 OMB-4th yr	2008 OMB-5th yr	2009 OMB-6th yr
Rate Year Operating Expenses	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525
Less 2003 Carryforward	(4,051,820)	-	-	-	-	-
Revenue Requirement before Debt	\$ 22,564,705	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525	\$ 26,616,525
Debt Service Payments:						
Principal and interest (sub bonds)	17,773,930	21,393,007	25,691,586	28,184,665	28,832,308	28,425,528
OMB debt service	4,072,360	7,810,270	10,084,835	11,524,338	11,525,525	11,533,175
TECP debt service						
Coverage	5,461,572	7,300,819	8,944,105	9,927,251	10,089,458	9,989,676
	27,307,862	36,504,096	44,720,526	49,636,254	50,447,291	49,948,379
Revenue Requirement	\$49,872,567	\$63,120,621	\$71,337,051	\$76,252,779	\$77,063,816	\$76,564,904
Net Operating Income	748,089	946,809	1,070,056	1,143,792	1,155,957	1,148,474
Rate Year Revenue Requirement	A \$ 50,620,656	\$ 64,067,430	\$ 72,407,107	\$ 77,396,571	\$ 78,219,773	\$ 77,713,378
Prior Year Revenue	B \$ 44,451,213	\$ 50,620,656	\$ 64,067,430	\$ 72,407,107	\$ 77,396,571	\$ 78,219,773
(A/B-1) as a percentage	13.88%	26.56%	13.02%	6.89%	1.06%	-0.65%
Cost to Average Residential User	\$233.32	\$295.29	\$333.73	\$356.73	\$360.52	\$358.19

**Narragansett Bay Commission
Debt Carry Forward 2003**

Schedule WEE-32

Docket 3409 (FYE 2003)

<u>Amount approved in Rates:</u>	<u>FYE 2003</u>
Principal	10,615,296
Interest	6,743,059
	<u>17,358,355</u>

<u>Projected Debt</u>	
Exisiting	10,292,405
Proposed	3,014,130
	<u>13,306,535</u>

4,051,820

/2

Debt Carry Forward 2003	<u><u>2,025,910</u></u>
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Narragansett Bay Commission
Revenue Requirement at Percentage Increase

Schedule WEE-33

Calculation of Percentage Increase in Revenue Requirement

Revenue Increase (WEE-4)	\$ 13,826,248	
Rate Year Revenue at Old Rates (WEE-4)	\$ 44,451,213	<u>31.10%</u>

Calculation of Across the Board Increase Percentage

Revenue Increase	\$ 13,826,248	
Revenue Items which could be increased by an across the board % Increase		
Flat Fees Residential	\$ 7,699,246	
Measured Fee - Residential	14,945,977	
Flat Fees Commercial & Industrial	4,972,261	
Discharge Permit Fees	1,084,693	
Septage Income	741,233	
Measured Fee - Commercial	11,807,677	
Measured Fee - Industrial	2,246,872	
BOD/TSS Surcharge	146,898	
Connection Permit Fees	66,156	
Total Revenue Available for Increase	<u>\$ 43,711,013</u>	
Across the Board Percentage Increase		<u>31.6%</u>

Narragansett Bay Commission
Rate Year Revenue By Source

Schedule WEE-34

User Fee Revenues

	UNITS	RATES	REVENUE
Residential			
Dwelling Units	112,831	\$89.80	\$ 10,132,224
Flow	10,689,623	\$1.84	19,668,906
Non-Residential - Metered Accounts			
5/8"	3,828	\$200	765,600
3/4"	880	\$301	264,880
1"	1,045	\$501	523,545
1 1/2"	832	\$1,002	833,664
2"	1,799	\$1,603	2,883,797
3"	73	\$3,006	220,809
4"	51	\$5,010	254,278
6"	57	\$10,019	566,120
8"	13	\$16,031	208,420
10"	1	\$23,044	23,046
Total Flat Fees from Metered Accounts			6,544,159
Commercial Consumption	5,825,507	\$2.67	15,554,104
Industrial Consumption	1,719,119	\$1.72	2,956,884
Total User Fee Revenues			54,856,277

Miscellaneous Revenue

DISCHARGE PERMIT FEES	1,427,456	
CONNECTION PERMIT FEES	87,061	
BOD/TSS SURCHARGE	193,318	
SEPTAGE INCOME	975,463	
MISC. OPERATING INCOME	1,883	
INTEREST INCOME	244,713	
LATE CHARGE PENALTY	470,674	
REIMBURSE ENFORCEMENT CO	0	
ENVIRONMENTAL ENFORCEMI	0	
REIMBURSED COLLECTION CO	16,981	
GRANT	0	
REVENUE REQUIREMENT	0	
ABATEMENT	4,428	
MISCELLANEOUS INCOME	1,521	
Total Miscellaneous Revenue		3,423,498

Total Revenues 58,279,775

Per WEE-4, Rate Year 58,277,461

Difference: \$ 2,314

* Revenue Per WEE-4	\$ 44,451,213
Shortfall Per WEE-4	<u>13,826,248</u>
Total Revenue Requirement	\$ 58,277,461

**Narragansett Bay Commission
Ratepayer Impact**

Schedule WEE-35

	Current Rates	Proposed Rates	Dollar Increase	% Increase
97.6 HCF Residential				
Customer Charge	\$ 68.24	\$ 89.80	\$ 21.56	
Consumption	136.64	179.82	43.18	
Total 97.6 HCF Residential	<u>\$ 204.88</u>	<u>\$ 269.62</u>	<u>\$ 64.74</u>	<u>31.6%</u>
5/8" meter, 244 HCF Commercial				
Customer Charge	\$ 152.27	\$ 200.39	\$ 48.12	
Consumption	495.32	651.84	156.52	
Total 5/8" meter, 244 HCF Commercial	<u>\$ 647.59</u>	<u>\$ 852.23</u>	<u>\$ 204.64</u>	<u>31.6%</u>
2" meter, 2440 HCF Commercial				
Customer Charge	\$ 1,218.15	\$ 1,603.09	\$ 384.94	
Consumption	4,953.20	6,518.41	1,565.21	
Total 2" meter, 2440 HCF Commercial	<u>\$ 6,171.35</u>	<u>\$ 8,121.50</u>	<u>\$ 1,950.15</u>	<u>31.6%</u>
5/8" meter, 244 HCF Industrial				
Customer Charge	\$ 152.27	\$ 200.39	\$ 48.12	
Consumption	319.64	420.74	101.10	
Total 5/8" meter, 244 HCF Industrial	<u>\$ 471.91</u>	<u>\$ 621.13</u>	<u>\$ 149.22</u>	<u>31.6%</u>
2" meter, 2440 HCF Industrial				
Customer Charge	\$ 1,218.15	\$ 1,603.09	\$ 384.94	
Consumption	3,196.40	4,207.42	1,011.02	
Total 2" meter, 2440 HCF Industrial	<u>\$ 4,414.55</u>	<u>\$ 5,810.51</u>	<u>\$ 1,395.96</u>	<u>31.6%</u>

Narragansett Bay Commission
Comparative Analysis CIP
FY 2003-2007 & FY 2004-2008
(000's)

Schedule WEE-36

Project Number	Project Name	NBC's FY2003-2007 CIP			NBC's FY2004-2008 CIP			Increase/ (Decrease)
		Pre-FY 2003	FY 2003-2007	To-Date 2007	Pre-FY 2004	FY 2004-2008	To-Date 2008	
Wastewater Treatment Facility Improvements								
103	Short-Term Solids Handling Improvements	\$ 239	\$ 2,081	\$ 2,320	\$ -	\$ 810	\$ 810	\$ (1,510)
104C	Septage Receiving Facilities	1,663	-	1,663	Project Complete		1,663	-
109.01	FPWWTF- Nitrogen Removal Facilities and Odor Control	161	33,153	33,314	368	39,300	39,668	6,354
109.02	FPWWTF- Improvements to Grit Facilities Study	53	-	53	Project Complete		53	-
109.03	FPWWTF - Odor Control at Field's Point	-	-	-	10	54	64	64
113.01P	Incinerator Permitting	-	-	-	48	165	213	213
114.00P	Water Quality Background Monitoring, Including Nutrients	-	-	-	372	90	462	462
115.00P	Asset Management System	-	-	-	75	125	200	200
807	BPWWTF CSO Facilities and Other Improvements	17,268	54,262	71,530	24,076	51,739	75,815	4,285
Site Specific	Site Specific Criteria	250	-	250	-	-	250	-
	Sub-total - Wastewater Treatment Facility Improvements	(A) \$ 19,634	\$ 89,496	\$ 109,130	\$ 24,949	\$ 92,283	\$ 119,198	\$ 10,068
Sewer System Improvements								
Phase I CSO Facilities:								
Phase I CSO Design:								
302.03D	Design	\$ 11,948	\$ -	\$ 11,948	\$ 14,743	\$ 110	\$ 14,853	\$ 2,905
	Sub-total - Phase I CSO Design	(B) \$ 11,948	\$ -	\$ 11,948	\$ 14,743	\$ 110	\$ 14,853	\$ 2,905
Phase I CSO Construction:								
302.03RS	Program Management and Construction Management	\$ 2,368	\$ 23,217	\$ 25,585	\$ 7,260	\$ 22,990	\$ 30,250	\$ 4,665
302.04C	MRI	5,608	249	5,857	Project Complete		5,857	-
302.05C	Floatables Control	985	-	985	Project Complete		985	-
302.06.00	OCIP (Owner Controlled Insurance Program)*	-	-	-	7,286	6,901	14,187	14,187
302.06C	Main Spine and Ancillary Facilities	23,238	172,812	196,050	64,855	115,316	180,171	(15,879)
302.07C	Preparation of Workshaft Site Termination	-	440	440	-	-	440	-
302.08C	Overflows 004/061**	774	10,576	11,350	5,781	2,464	8,245	(3,105)
302.09C	Overflow 009 and Emergency Overflow Structure	75	5,627	5,702	-	6,487	6,487	785
302.10C	Overflow 032	-	6,891	6,891	-	7,000	7,000	109
302.11C	Woonasquatucket Interceptor Relief	-	4,378	4,378	1,850	2,750	4,600	222
302.12C	Overflow 067	-	4,410	4,410	-	4,510	4,510	100
302.13C	Regulator Modifications	-	1,573	1,573	-	1,683	1,683	110
302.14C	Tunnel Pump Station Fitout and Startup	-	33,309	33,309	-	33,660	33,660	351
302.15C	Overflows 006/007**	-	-	-	4,398	5,449	9,847	9,847
302.20C	CSO Land Acquisition (RIDOT)	3,040	-	3,040	Project Complete		3,040	-
	Sub-total - Phase I CSO Construction	(C) \$ 36,088	\$ 263,482	\$ 299,570	\$ 91,430	\$ 209,210	\$ 310,962	\$ 11,392
Other Projects:								
302.21	CSO Flow and Water Quality Monitoring	\$ -	\$ -	\$ -	\$ 250	\$ 1,000	\$ 1,250	\$ 1,250
302.22P	Stormwater Attenuation Pilot Study	-	-	-	100	300	400	400
304	Evaluation and Cleaning of CSO Interceptors	-	-	-	1,154	5,000	6,154	6,154
304.03	Saylesville Pump Station Force Main Repair	833	-	833	Project Complete		833	-
304.04	Inspection and Evaluation of CSO Interceptors	1,110	5,000	6,110	-	-	-	(6,110)
704	Rehabilitation of Washington Highway and Omega Pump Stations	1,952	5,764	7,716	667	5,764	6,431	(1,285)
304.07D	Concord Street Sewer Repair	-	-	-	325	300	625	625
304.09D	Burrinton Street and Grotto Brook Sewer Repairs	-	-	-	175	1,100	1,275	1,275
304.10P	Sewer System Infiltration/Inflow Study	-	-	-	500	3,000	3,500	3,500
304.11C	Floatables Control Facilities	-	-	-	1,895	15,630	17,525	17,525
903	Geographic Information System Implementation	839	750	1,589	637	235	872	(717)
	Sub-total - Other Projects	(D) \$ 4,734	\$ 11,514	\$ 16,248	\$ 5,703	\$ 32,329	\$ 38,865	\$ 22,617
	Sub-total - Sewer System Improvements	(B)+(C)+(D) \$ 52,770	\$ 274,996	\$ 327,766	\$ 111,876	\$ 241,649	\$ 364,680	\$ 36,914
Building & Grounds Improvements								
904	NBC Corporate Office Building, Laboratory and ICM Building	\$ 10,000	\$ 100	\$ 10,100	Project Complete		\$ 10,100	\$ -
	Sub-total - Building & Grounds Improvements	(E) \$ 10,000	\$ 100	\$ 10,100	\$ -	\$ -	\$ 10,100	\$ -
Total Capital Improvement Program								
	(A)+(B)+(C)+(D)+(E)	\$ 82,404	\$ 364,592	\$ 446,996	\$ 136,825	\$ 333,932	\$ 493,978	\$ 46,982

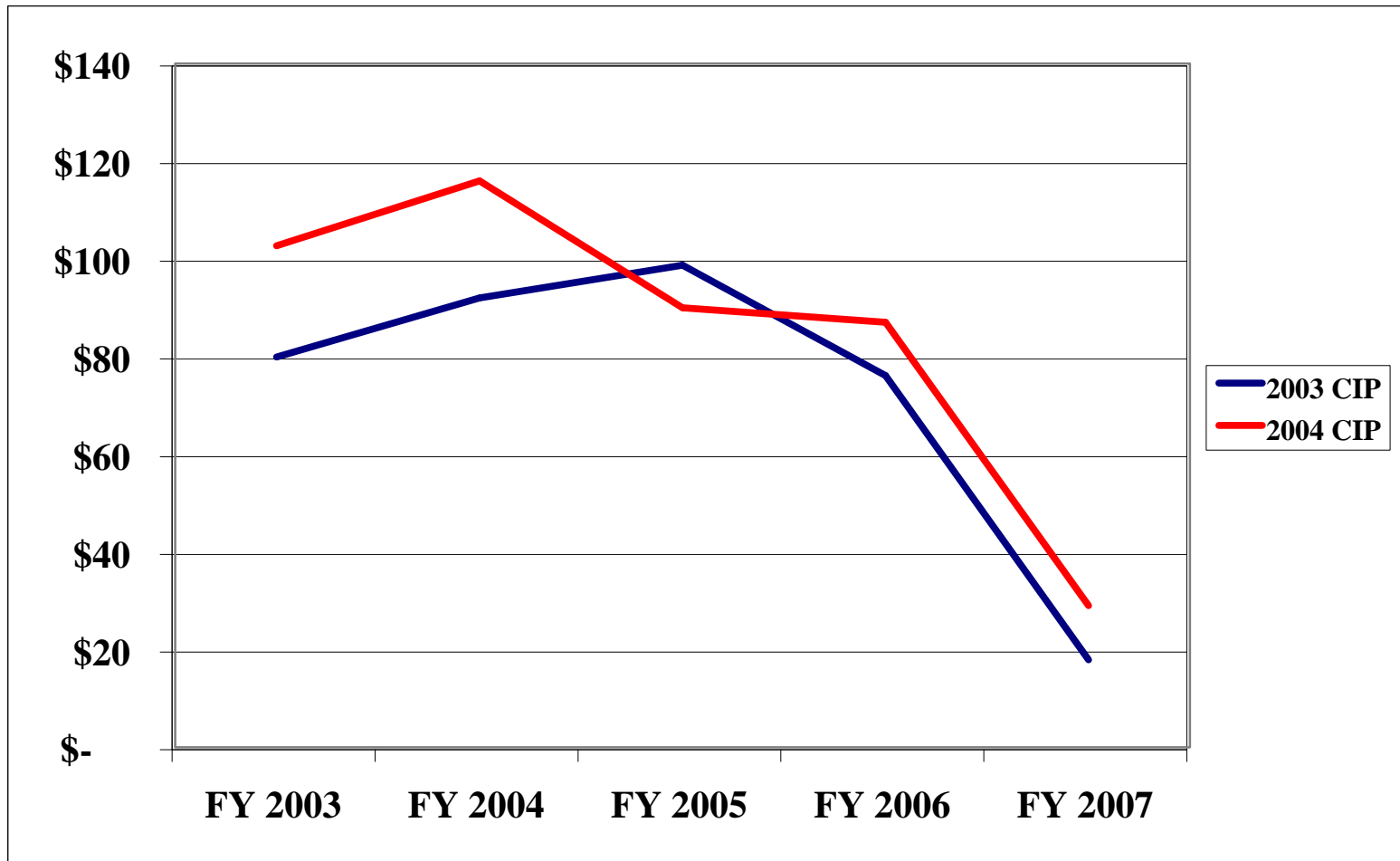
Narragansett Bay Commission
Subsequent Analysis - CSO
(in 000's)

Schedule WEE-37

Project Number	Project Name	To-Date 2008	Estimated Contract Cost	Estimated Contingency	Total Current Estimate	Increase/ (Decrease)
Phase I CSO Facilities:						
Phase I CSO Design:						
302.03D	Design	(A) \$ 14,853	\$ 12,022		\$ 12,022	\$ (2,831)
Phase I CSO Design - Other:						
	Land Costs - Design	Inc. Above			1,398	1,398
	Staff/Police Detail/Legal Costs - Design	Inc. Above			1,433	1,433
	Sub-total - Phase I CSO Design Other	(B) -			2,831	2,831
Total - Phase I CSO Design		(A)+(B) \$ 14,853	\$ 12,022	\$ -	\$ 14,853	\$ -
Phase I CSO Construction:						
302.03RS	Program Management and Construction Management	\$ 30,250	\$ 30,250	\$ -	\$ 30,250	\$ -
302.04C	MRI	5,857	4,536	454	4,990	(867)
302.05C	Floatables Control	985	746	-	746	(239)
302.06.00	OCIP (Owner Controlled Insurance Program)*	14,187	14,184	-	14,184	(3)
302.06C	Main Spine and Ancillary Facilities	180,171	163,527	16,353	179,880	(291)
302.07C	Preparation of Workshaft Site Termination	440	439	44	482	42
302.08C	Overflows 004/061	8,245	7,396	740	8,136	(109)
302.09C	Overflow 009 and Emergency Overflow Structure	6,487	5,115	512	5,627	(860)
302.10C	Overflow 032	7,000	5,901	590	6,491	(509)
302.11C	Woonasquatucket Interceptor Relief	4,600	4,025	403	4,428	(172)
302.12C	Overflow 067	4,510	4,009	401	4,410	(100)
302.13C	Regulator Modifications	1,683	1,430	143	1,573	(110)
302.14C	Tunnel Pump Station Fitout and Startup	33,660	30,281	3,028	33,309	(351)
302.15C	Overflows 006/007	9,847	8,894	889	9,784	(63)
302.20C	CSO Land Acquisition (RIDOT)	3,040	3,040	-	3,040	-
	Sub-total - Phase I CSO Construction	(C) \$ 310,962	\$ 283,774	\$ 23,555	\$ 307,330	\$ (3,632)
Phase I CSO Other:						
	CSO Land Costs	Inc. Above			\$ 2,384	\$ 2,384
	CSO Construction Staff/Police Detail/Legal Costs	Inc. Above			\$ 3,382	\$ 3,382
	Sub-total - Phase I CSO Other	(D) -			\$ 5,766	\$ 5,766
Total - Phase I CSO Construction		(C)+(D) \$ 310,962	\$ 283,774	\$ 23,555	\$ 313,096	\$ 2,134
Total - Phase I CSO Construction & Design		(A)+(B)+(C)+(D) \$ 325,815	\$ 295,796	\$ 23,555	\$ 327,949	\$ 2,134

**Narragansett Bay Commission
CIP Cash Flows**

Schedule WEE-38



1
2 **NARRAGANSETT BAY COMMISSION**
3

4 **PRE-FILED DIRECT TESTIMONY**
5 **OF JOSEPH PRATT**
6
7

8 **Q. Please state your name and address.**

9 A. Joseph Pratt My business address is 295 Promenade Street, Providence, RI
10 02908.
11

12 **Q. For whom are you employed and what is your position?**

13 A. I am employed by the firm of the Louis Berger Group, Inc. I am a Vice President
14 of the firm. In that capacity I am responsible for Environmental Engineering in
15 New England and the operation of the Providence office.
16

17 **Q. For how long have you been so employed?**

18 A. I have worked at the Louis Berger Group since November 1991. Prior to that I
19 was a commissioned officer (Corps of Engineers) in the United States Army for
20 over thirty-one years. I retired from the Army in 1991 with the rank of Brigadier
21 General.
22

23 **Q. What are your educational and professional credentials?**

24 A. I have a Masters Degree in Systems Engineering from Michigan State University.
25 I also have a Bachelors Degree in Civil Engineering from the University of
26 Missouri at Rolla and a Bachelors Degree in Chemical Engineering from
27 Clarkson University. I completed all levels of military education through the War

1 College level. I attended the Center for Creative Leadership in Greensboro, NC.

2 I am a Fellow in the Society of American Military Engineers.

3

4 **Q. Have you testified before the Rhode Island Public Utilities Commission**
5 **(PUC) previously?**

6 A. Yes. I testified before the PUC under Docket 3162 and Docket 3409.

7

8 **Q. What is the purpose of your testimony?**

9 A. To update the PUC on the status of the NBC's Combined Sewer Overflow (CSO)
10 Abatement Program.

11

12 **Q. What is your relationship with the NBC?**

13 A. Since 1992 my firm has been under contract to NBC to provide management
14 services for the CSO Program. During that timeframe I have been the Program
15 Manager for the CSO Program. In that capacity I have worked closely with the
16 NBC staff on all aspects of the Program. I have also provided information
17 directly to the Board of Commissioners.

18

19 **Q. Can you please provide an update on the status of the CSO Abatement**
20 **Program?**

21 A. All design has been approved by Rhode Island Department of Environmental
22 Management (RIDEM). The RIDEM issued an order of approval for the Tunnel

1 Pump Station and the Instrument and Control System on August 27, 2002. These
2 were the final design packages for the Phase I Facilities.

3

4 In accordance with the Consent Agreement, NBC has five years to complete
5 construction of the Phase I Facilities. The CRMC has issued a permit for the
6 Phase I Facilities.

7

8 The project has been split into fifteen (15) separate projects, including twelve (12)
9 construction projects, the program management project, the drop shaft land
10 acquisition project, and the Owner Controlled Insurance Program (OCIP).
11 Projects that are expected to incur costs in the fiscal years 2004 –2008 are
12 reflected in the NBC's Capital Improvement Plan (CIP) for fiscal years 2004-
13 2008, included as an Exhibit as part of Ray Marshall's testimony (Exhibit RM-1).

14

15 **Q. How is construction proceeding?**

16 A. The construction program continues to move forward. Construction has been
17 substantially completed on three projects; they are the Floatables Control
18 Demonstration Facility (302.05), the Moshassuck River Interceptor (MRI)
19 facilities (302.04), and the Department of Transportation (DOT) Land Acquisition
20 (302.20).

21

1 Construction on the single largest component of the Phase I CSO Facilities
2 project, the Main Spine Tunnel (Contract 302-06-C), has begun. The contractor
3 for this project, Shank/Balfour Beatty, began construction in February 2002.

4

5 We received bids on Contract 302.08 (Construction of the Overflow 004/061
6 Facilities) on March 25, 2002. The contract was awarded to R.P. Iannucillo and
7 Sons Construction Co. in the amount of \$7,396,000. A notice to proceed was
8 issued on July 2, 2002 and construction is currently underway.

9

10 We received bids on Contract 302.07-C (Foundry Shaft Site Demolition) on
11 August 21, 2002. The contract was awarded to Fleet Environmental Services
12 LLC in the amount of \$438,600. A notice to proceed was issued on November 8,
13 2002.

14

15 We received bids on Contract 302.15-C (Construction of Overflow 006/007
16 Facilities) on September 30, 2002. The contract was awarded to Barletta Heavy
17 Division, Inc. in the amount of \$8,894,444. We expect to issue a notice to
18 proceed in late November 2002.

19

20 The plans and specifications for Contract 302.11-C (Construction of the
21 Woonasquatucket River Interceptor Facilities) are scheduled to be put out to bid
22 on December 2, 2002 with bids expected February 5, 2003. Construction is
23 currently expected to start in April 2004.

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We expect to advertise two additional contracts in calendar year 2003. These are Contract 302.09C (Construction of the Emergency Overflow Structure / Overflow 009 Facilities) and Contract 302.10C (Construction of the Overflow 032 Facilities).

Q. Have you encountered any problems during construction?

A. As with any construction project unforeseen issues will arise during the actual construction of the project. To date we have encountered relatively few problems, however there have been, and will be, unforeseen issues that arise.

On Contract 302.04-C (Moshassuck River Interceptor Facilities) the contractor experienced difficulties in drilling the drop shaft, requiring the portion in rock to be redrilled. The contract finished 118 days late and the contractor has submitted a claim. The bulk of the claim is being contested by NBC. The completion delay of this contract will not impact the overall program.

The Main Spine Tunnel contract (302.06-C) has had difficulty in obtaining a completely frozen ring for initial ground support around the main work shaft. This could cause a delay of approximately 90 days. The exact reason or reasons for this are currently under investigation. The contractor has stated that he believes a Differing Site Condition (DSC) exists at the main work shaft

1 construction site and that it has impacted his ability to freeze the ground. The
2 contract is behind schedule and a DSC has the potential for a cost impact.

3

4 The contractor has expressed concern over the configuration and safety of the
5 Tunnel Pump Station (TPS) cavern. As a result, a third party reviewer was hired
6 to prepare a “constructability” report. This report has been completed and
7 forwarded to the contractor.

8

9 **Q. Do you have an updated schedule for this program?**

10 A. Yes. Attached to my testimony as Exhibit JP-1 is a copy of the current
11 construction schedule for the Phase I facilities.

12

13 **Q. Have the cost estimates for this project been updated?**

14 A. Yes. The costs associated with this project are updated on a continual basis. The
15 current cost estimate for the construction of Phase I Facilities is \$283,774,000.
16 This includes management and insurance costs. The NBC maintains a 10%
17 contingency factor for CSO costs in its CIP as well as administration (staff, police
18 detail, legal costs, etc.) and land costs.

19

20 **Q. What is the reason for the increase in cost?**

21 A. Several factors contribute to the fluctuation in overall cost. In the testimony I
22 provided in Docket 3409 I stated the cost estimate at “\$275 million for all of the
23 CSO related contracts plus a 10% contingency for the CSO construction

1 contracts". This cost estimate was based on fourteen contracts, four of which
2 were bids, while the remaining ten were estimates developed in calendar year
3 2000.

4
5 Since the \$275 million estimate, four more contracts have been bid and the costs
6 estimates on the remaining contracts have been updated.

7
8 One of the more significant increases can be attributed to contract 302.08-C
9 (Overflows 006/007/004/061). This project was originally intended to encompass
10 overflows 006, 007, 004 and 061 and had an estimated construction cost of \$9.9
11 million. Due to concerns relating to the complexity of this project the decision
12 was made to split the project into two independent contracts, 302.08-C
13 (Overflows 004/061) and 302.15-C (Overflows 006/007). The bid prices for these
14 contracts mentioned above are \$7,396,000 and \$8,894,444, for a total of
15 \$16,290,444. This represents an increase of \$6.4 million over the calendar year
16 2000 estimate. The complexity and risk involved in these contracts and the
17 general increase in construction cost account for the majority of the increase.

18
19 It is important to note that the costs estimates relating to the CSO program will be
20 updated and revised throughout the entire project. This is due to changes in
21 design, particularly final placement of facilities, the addition of revised or updated
22 information and any modification (inflation) to the general cost of the
23 construction.

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Q. Given the ongoing concerns pertaining to cost containment, what measures are being used to ensure that this project will continue to be managed properly?

A. The Louis Berger Group has the overall program management responsibility. Our Program Management Team remains strong and brings a substantial amount of experience and expertise to the oversight of the project. We have weekly management meetings with the prime contractors for each contract. A detailed review and approval procedure for all contract submittals is in place. All monthly pay requisitions are closely reviewed and approved by the Resident Engineer, the Construction Manager and myself prior to submission to NBC. We track all potential change orders and claims until final determination is reached. Throughout this process, we advise NBC of the situation and potential impact of each action. In addition, we have established a Disputes Resolution Board (DRB) to expedite the resolution of any issues that may arise during construction on Contract 302.06C. The DRB is comprised of three members with strong technical and management experience in underground construction. In general, the DRB is accepted as the most efficient and effective manner to resolve major issues in a timely fashion. The bid documents have been escrowed and are available should a dispute arise.

1 All members of the Program Management Team take their responsibility very
2 seriously and are diligent in their efforts to ensure that the project stays on
3 schedule and on budget. Despite our vigilance, however, one should not lose
4 sight of the fact that if we encounter conditions other than what we expected, it
5 could impact the rate of progress of the project and may have an adverse impact
6 on costs.

7

8 **Q. Has the DRB met to discuss any problems concerning the Main Spine**
9 **Tunnel?**

10 A. The DRB meets every quarter to discuss issues on the project and to receive an
11 update. In addition, they are provided the reports from the weekly progress
12 meetings. To date they have met two times; May 2, 2002, and August 22, 2002.
13 The next meeting is scheduled for December 12, 2002.

14

15 **Q. Does this conclude your prefiled testimony?**

16 A. Yes.

CSO PROGRAM PHASE I SCHEDULE

ID	Task Name	2001				2002				2003				2004				2005				2006				2007				2008							
		4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4							
1	C4 MRI	5/30/01				10/16/02																															
14																																					
15	C6 MAIN SPINE, TPS AND SHAFTS									1/30/02																											
36																																					
37	C7 FOUNDRY WORK SITE DEMOLITION									11/15/02				2/28/03																							
40																																					
41	C8 OF 004/061									7/2/02				10/9/03																							
48																																					
49	C15 OF 006/007									11/27/02				4/11/04																							
51																																					
52	C9 EOS & OF 009/010													8/11/03				11/11/04																			
54																																					
55	C10 OF 032													10/27/03				3/11/05																			
57																																					
58	C11 WRI									2/26/03				7/13/04																							
61																																					
62	C12 OF 067																																				
65																																					
66	C13 REGULATOR MODIFICATIONS OF# 12, 13, 16, 42, 43, 44																																				
69																																					
70	C14 TPS & S1 FITOUT, BLDG, ICS, STARTUP																	5/3/04				11/17/05								12/30/04				5/25/07			

Data Date: 11/4/02
Activity Start Dates
= Notice To Proceed

Summary

1
2 **NARRAGANSETT BAY COMMISSION**
3

4 PRE-FILED DIRECT TESTIMONY
5 OF THOMAS BRUECKNER
6
7

8 **Q. Please state your name and address.**

9 A. Thomas Brueckner. My business address is One Service Road, Providence, RI
10 02905.
11

12 **Q. For whom are you employed and what is your position?**

13 A. I am employed by the Narragansett Bay Commission (NBC) as the Engineering
14 Manager.
15

16 **Q. For how long have you been so employed by the NBC?**

17 A. I have been the Engineering Manager for 12 years and in this capacity I have
18 managed the design of many capital improvement projects. Prior to that I was the
19 Pretreatment Program Manager for six years.
20

21 **Q. What are your educational and professional credentials?**

22 A. I have a B.A. degree in mathematics from Fordham University and a M.S. degree
23 in Civil Engineering from University of Rhode Island. I am a registered
24 professional engineer in the State of Rhode Island.
25

1 **Q. Have you testified before the Rhode Island Public Utilities Commission**
2 **(PUC) previously?**

3 A. Yes, I testified for the NBC in Docket 3409.

4

5 **Q. What is the purpose of your testimony?**

6 A. To update the PUC on the status of Contract 807: Improvements to the Bucklin
7 Point Wastewater Treatment Facility; Contract 109: Nitrogen Removal at the
8 Field's Point Wastewater Treatment Facility, Contract 302.05: Floatables
9 Control, Contract 304.00: Evaluation and Cleaning of Combined Sewer Overflow
10 (CSO) Interceptors and Contract 304.11: Floatables Control Facilities. In
11 addition, to explain the significant cost reductions in Contract 704: Investigation
12 and Rehabilitation of the Washington Highway and Omega Pump Stations and
13 Contract 903: Geographic Information System Implementation (GIS).

14

15 **Q. Can you please explain why the Improvements to Bucklin Point are**
16 **required?**

17 A. Under the Rhode Island Pollution Discharge Elimination Standards permit
18 (RIPDES) in effect when NBC acquired the Bucklin Point facilities, Bucklin
19 Point was permitted to treat 84 million gallons per day (mgd). It was
20 subsequently determined that the facility could only handle 60 mgd, so the project
21 was initially intended to address a flow capacity issue. However, further
22 assessment revealed that the headworks, including grit removal, pre-aeration
23 tanks, and barscreens, which were over 50 years old, also needed to be replaced

1 and the scope of the project was expanded. In addition, it was determined that the
2 mechanical mixers in the aeration tanks are not energy efficient and should be
3 replaced with a fine aeration bubble diffuser system. Lastly, due to toxicity issues
4 associated with the use of chlorine, it was determined that the current chlorine
5 disinfection system should be replaced by an ultraviolet disinfection system.

6 The final design plans provide wet weather capacity for up to 116 mgd. This will
7 enable the facility to provide primary treatment for all the CSO flows currently
8 discharged untreated to the Seekonk River from the north diversion structure at
9 Bucklin Point. This project also entails the installation of a computer controlled
10 instrumentation and control system similar to that used at Field's Point. This will
11 allow the plant to be run more efficiently and will provide more control over the
12 treatment processes.

13

14 **Q. What is the current status of this project?**

15 A. Project 807 is currently underway and is ahead of schedule. The engineer for this
16 project is Camp, Dresser & McKee and the Contractor is J.L. Marshall & Sons,
17 Inc. Work is currently being done to increase peak flow to 116 mgd, construct
18 and rehabilitate clarifiers, provide influent pumping, construct new screening and
19 grit facilities, install a ultraviolet disinfection system, increase nitrogen removal to
20 8 mg/1 year round and implement a new diffused air system. In NBC's FY 2004-
21 2008 Capital Improvement Program (CIP), NBC estimates the total design and
22 construction costs of Contract 807 to be approximately \$75.8 million. To date, the

1 amount spent on design and construction for Contract 807 is approximately \$15.7
2 million.

3 **Q. Can you please discuss what is driving the need for the nutrient removal**
4 **project at Field's Point?**

5 A. The Rhode Island Department of Environmental Management (RIDEM) is in the
6 process of determining Total Maximum Daily Loads (TMDL) for nitrogen for
7 area recovery waters. Once the TMDLs are determined they will be used to
8 establish permit limits for nitrogen in NBC's RIPDES permit. RIDEM is
9 concerned about nutrients, such as nitrogen, because nutrients that reach the
10 receiving waters generate algal growth and when the algae die, oxygen is used as
11 part of the decomposition process. Since fish and other aquatic life need oxygen
12 to live, excessive nutrients adversely impact their environment. RIDEM is looking
13 to tighten the nitrogen standards for treatment facilities because in tidal waters
14 nitrogen is the nutrient that must be controlled to control algal growth.

15
16 At this point, RIDEM is performing a study to determine nutrient limits for
17 treatment facilities. NBC has hired one of the best nationally known firms with
18 expertise in nitrogen removal, CH2M Hill, to prepare the facilities plan for Field's
19 Point. The preliminary analysis by CH2M Hill indicates that seasonal removal
20 (summer months) of nitrogen could be accomplished and reduces nitrogen levels
21 to 8 milligrams per liter (8 mg/l) with the existing aeration tanks. If RIDEM
22 requires year-round nitrogen removal, then additional aeration tankage would be
23 required which would increase the cost from \$13 million to \$55 million.

1 Currently, NBC's 2004-2008 CIP identifies Contract 109's total design and
2 construction costs at \$39.6 million. If nitrogen removal were required year round
3 to a limit of less than 5 mg/l, the capital cost would be closer to \$78 million.
4

5 **Q. What is the current status of this project?**

6 A. The facilities plan was initiated and the cost of alternatives associated with
7 various nitrogen removal limits were determined. However, NBC cannot finish
8 the facilities plan until RIDEM establishes the nitrogen limits through their
9 TMDL process. Currently, NBC's Environmental Monitoring and Data Analysis
10 department (EMDA) is conducting sampling for TMDLs related to Contract 109
11 as part of NBC's STAR project (see Juan Mariscal's testimony for further
12 explanation). RIDEM is currently developing a water quality model to assist in
13 the establishment of TMDL standards. RIDEM will not be able to develop their
14 limits until the model is complete. Once the RIDEM establishes the waste load
15 allocation NBC will be able to complete the facilities plan and know the cost of
16 the project. To date, NBC has spent approximately \$123,000 on this project.
17

18 **Q. Can you please explain the need for the Floatables Control project along with**
19 **the benefits of the project?**

20 A. As part of the nine minimum controls required under the Environmental
21 Protection Agency's (EPA) CSO Control Policy, floatables control must be
22 provided at all CSO overflows. RIDEM is requiring that all CSO overflows to be
23 addressed in Phase II and III of the CSO program must be provided with

1 floatables control until construction of those phases is complete (in 8 – 12 years).
2 NBC will complete the evaluation of the trash net floatables control facility that
3 was installed at the Bucklin Brook overflow by the end of November 2002. On
4 the basis of this data, NBC will submit a plan for addressing floatables control for
5 Phase II and III overflows to RIDEM in early 2003. Design and construction of
6 the floatables control facilities at approximately 40 outfalls will follow. The
7 primary benefit of the floatables control projects will be to eliminate the discharge
8 of floatables from CSO overflows that are included in Phase II and Phase III of
9 the CSO project.

10

11 **Q. What is the current status of this project?**

12 A. Project 302.05C for the construction of the first floatables control facility has
13 been completed on budget. Contract 302.05 has been removed from NBC's CIP
14 and final costs for the project are approximately \$753,000. To date the facility
15 has removed approximately fifty tons of floatable debris from Bucklin Brook. It
16 is expected that the facility will capture 50 – 80 tons of debris during the 77 rain
17 events that occur on average each year in Rhode Island. The project will have
18 some effects on NBC's operational budget as a result of regular maintenance.
19 Maintenance crews must regularly remove the nets after a storm and properly
20 dispose of both the debris and nets. The maintenance contract for the floatables
21 control facility will be \$65,000 per year (see Walter Edge's testimony, Exhibit
22 WEE-13). In addition, NBC will incur the costs associated with the disposal of
23 debris at the Rhode Island Resource Recovery Corporation (RIRRC) landfill and

1 the purchase of new nets. The estimated costs of nets per year are \$60,500 and
2 disposal costs will be approximately \$4,028 per year (see Walter Edge's
3 testimony, Exhibit WEE-10).

4

5 **Q. Can you please explain the reason for project 304.11, the Floatables Control**
6 **Facilities found in the 2004-2008 CIP?**

7 As mentioned previously in the explanation for project 302.05, floatables control
8 must be provided at all CSO overflows. RIDEM will require that all CSO
9 overflows to be addressed in Phase II and III of the CSO program must be
10 provided with floatables control until Phases II and III are completed. Contract
11 302.05 was for the construction of one of these floatables control facilities to
12 demonstrate how well it performed. Contract 304.11 is for the construction of the
13 approximately 40 floatables control facilities that must follow. It is expected that
14 these facilities will eliminate the discharge of floatables from CSO overflows that
15 are included in Phase II and Phase III of the CSO project.

16

17 **Q. What is the current status of this project?**

18 A. Contract 304.11 is scheduled to begin in December 2002 and end in June 2007.
19 The estimated design and construction costs of the project are \$17.5 million,
20 however.

21

1 **Q. Can you please explain the reason for project 304.00, the Evaluation and**
2 **Cleaning of CSO Interceptors and the expected benefits?**

3 A. This project involves television inspection of all interceptor sewers owned by
4 NBC over the next ten years to determine their condition, and to develop solutions
5 to any problems, which may be identified. Based on inspections done to date, the
6 interceptors primarily need to have accumulated grit and debris removed. As a
7 result of this project the NBC expects to improve the carrying capacity of the
8 sewers and reduce CSO discharge volumes. In addition, new federal regulations
9 require all sewer agencies in the country to develop capacity, management,
10 operation and maintenance (CMOM) programs to identify how they will operate
11 and maintain their sewer systems to prevent sanitary sewer overflows (SSO's) and
12 other problems.

13

14 **Q. What is the current status of this project?**

15 A. To date several inspections of sewers, including the Concord Street, Burrington
16 Street and Grotto Brook sewers, have been implemented. As a result of the
17 inspections, NBC found the Concord Street interceptor to be severely damaged
18 and in need of immediate repair or replacement. Similarly, the Burrington and
19 Grotto Brook inspection revealed that the Burrington Street interceptor was
20 damaged and in need of repair or replacement. The Grotto Brook sewer also needs
21 some rehabilitation work. The majority of inspections, however, have shown that
22 interceptors primarily need to have accumulated grit and debris removed. Overall
23 the project has been invaluable in removing accumulated sediments in the pipe

1 and showing the NBC where maintenance or repairs are required. In NBC's
2 2004-2008 CIP, NBC estimates the cost of Contract 304.00 to be \$1 million per
3 year.

4

5 **Q. Mr. Brueckner, it is evident when looking at the FY 2003 CIP versus the FY**
6 **2004 CIP that there are decreases in estimated costs for Contracts 704 and**
7 **903. Could you please explain these decreases?**

8 A. Estimated project costs for Contract 704 have decreased approximately \$1.2
9 million from when the FY 2003 CIP was distributed to when the FY 2004 CIP
10 was distributed. The reason for this change is that NBC's estimates were higher
11 than the actual costs for the design phase of the project. Initial cost estimates
12 were approximately \$1.8 million for design but amounted to approximately
13 \$500,000, thus accounting for this decrease.

14 Similarly, Contract 903 estimated project costs have been reduced by nearly
15 \$700,000. The decrease in estimated costs for Contract 903 resulted from
16 changes in the project's scope of work. Initially NBC's plans were to develop
17 Geographic Information System (GIS) sewer coverage for all sewers in the
18 district, NBC owned as well as the lateral sewers owned by the municipalities.
19 However, it has been decided that NBC will only map the lines that it owns. This
20 has impacted the costs for the project as well as the expected duration of the
21 construction phase. NBC now expects Contract 903 to be completed in June 2003
22 as opposed to December 2004, which was the previous project completion date as
23 seen in the FY 2003 CIP.

1

2 **Q. Does this conclude your prefiled testimony?**

3 **A. Yes.**

1
2 **NARRAGANSETT BAY COMMISSION**

3
4 **PRE-FILED DIRECT TESTIMONY**
5 **OF MAUREEN GURGHIGIAN**
6

7
8 **Q. Please state your name.**

9
10 A. My name is Maureen E. Gurghigian, Senior Vice President with First Southwest
11 Company.
12

13 **Q. Could you please describe your education and employment background?**

14 A. I hold a masters degree in business administration from the University of Rhode
15 Island. Prior to joining First Southwest, I worked for Fleet Bank and/or Fleet
16 Securities for 16 years, all in municipal finance. From 1993 through 2000, I
17 served as Manager of the New England Investment Banking Group of Fleet
18 Securities, Inc. Prior to joining Fleet, I spent 8 years in Rhode Island State
19 Government, including four years as Director of the Governor's Policy Office
20 under then Governor J. Joseph Garrahy.
21

22 Among other duties, I provide financial advisory services to issuers of municipal
23 debt, primarily in the State of Rhode Island. Annually, I am involved in more
24 than 20 publicly offered bond issues. In addition, I have supervisory
25 responsibility for First Southwest's involvement with borrowings by the State of
26 Rhode Island, numerous public agencies and 30 Rhode Island municipalities. The

1 Rhode Island Office assists clients with the origination of more than \$800 million
2 in public financing issues each year.

3

4 **Q. Can you describe the organization of First Southwest Company and the types**
5 **of services that they provide?**

6 A. Over its five-and-a-half decades, First Southwest Company has served as
7 financial advisor to many issuers such as schools, cities, airports, hospitals, sports
8 complexes, water and wastewater authorities and districts and toll roads.

9 Currently it serves more than 1,500 municipalities and agencies, including more
10 than 400 in New England. Last year, the firm was involved in the issuance of
11 more than \$12 billion in securities on behalf of our clients.

12

13 **Q. Do you hold any special licenses or certifications?**

14 A. I am a registered Municipal Principal with the Municipal Securities Rulemaking
15 Board and hold the Series 52, 53 and 63 licenses.

16

17 **Q. What is the purpose of your testimony?**

18 A. My testimony describes the long-term debt-model that was prepared for NBC and
19 also discusses the NBC's two capital financing alternatives.

20

1 **Q. Have you testified previously before the Rhode Island Public Utilities**
2 **Commission (RIPUC)?**

3 A. Yes. I have testified and provided pre-filed testimony before the RIPUC and/or
4 the Division of Public Utilities and Carriers on matters relating to the Pawtucket
5 Water Supply Board, the Providence Water Supply Board, the Kent County Water
6 Authority and the NBC.

7
8 **Q. What is your relationship with the NBC?**

9 A. I have served as financial advisor to the NBC for the past 12 years. I began
10 providing financial advisory services to NBC in 1989 while working for Fleet. In
11 my capacity as NBC's financial advisor, I have assisted the NBC with a number
12 of long-term borrowings from the Rhode Island Clean Water Finance Agency
13 (RICWFA) and several short-term borrowings. My services have included the
14 facilitation of the credit rating process, loan structuring, interest rate negotiation
15 and other functions.

16
17 **Q. Are you familiar with the NBC's capital program and financing needs over**
18 **the next several years?**

19 A. Yes. I have been working with the management and staff of NBC to develop a
20 long-term financing strategy for their capital program. This has included a
21 general review of the costs associated with their Capital Improvement Program
22 (CIP) along with a discussion and analysis of potential funding sources. At this
23 point, the NBC has begun construction of two significant projects and is looking

1 at financing a capital program of more than \$334 million in fiscal years 2004 –
2 2008 and \$102 million in fiscal year 2003.

3 **Q. What has been the NBC's primary source of capital funding?**

4 A. The State Revolving Loan Fund (SRF) administered by the Rhode Island Clean
5 Water Finance Agency (RICWFA) is NBC's primary means of financing its
6 capital program. The SRF program is the least costly financing alternative as it
7 has traditionally provided loans to borrowers at a subsidized rate that is 2/3 of the
8 market rate. In addition, the RICWFA's blended rate program reflects the bond
9 referendum passed by the voters in 2000. The blended rate program guarantees
10 the NBC a minimum of \$140 million in loans structured with 50% at zero percent
11 interest and 50% at the traditional subsidized rate. The NBC recently borrowed
12 \$57 million at the blended rate; therefore, the NBC is entitled to an additional \$83
13 million in blended rate loans.

14

15 **Q. Have there been any significant changes in NBC's proposed financing of the**
16 **CIP?**

17 A. Yes. As mentioned in the testimony of Walter Edge, a number of factors have
18 required us to reevaluate the long-term funding strategy for NBC. The single
19 most significant factor is the inability of the RICWFA to finance 100% of the
20 NBC's capital program. In the past the RICWFA was confident that they could
21 finance the NBC's entire program, however a number of factors appear to have
22 adversely impacted their ability to do so. These factors are discussed in the
23 testimony of Anthony Simeone, the Executive Director of the RICWFA.

24

1 **Q. When did these funding limitations become apparent?**

2 A. The NBC has been updating its cash flows and cost estimates for its CIP as
3 contracts have been bid and executed. It is our understanding that the RICWFA
4 began to reevaluate their funding capacity during the analytical work undertaken
5 as part of the development of the blended rate program. After the NBC met with
6 RICWFA to discuss the cash flow borrowing needs, along with the updated cash
7 flow figures in early 2002, the RICWFA indicated that it was not likely that they
8 would have sufficient capacity to finance NBC's entire program within the
9 spending period over fiscal years 2003-2007.

10

11 **Q. What is the projected gap in financing?**

12 A. Looking at NBC's capital funding needs in fiscal years 2003 – 2007, the NBC has
13 average annual needs of \$85 million and assuming that the RICWFA can lend
14 NBC \$60 million annually, there is a \$25 million annual shortfall. The funding
15 gap is even more significant in the early years when NBC's cash flow needs are
16 estimated at more than \$100 million per year. The gap in financing is graphically
17 illustrated in Exhibit MG-1 attached to my testimony. In fiscal year 2007, NBC's
18 needs are lower than the projected amount available from the RICWFA.

19

20 **Q. What are the financing options recommended by First Southwest?**

21 A. The NBC has two primary options. The first option is the use of traditional
22 revenue bonds (open market bonds). The second option is the establishment of a
23 Variable Rate Debt Obligation (VRDO) program that would incorporate the

1 issuance of Tax Exempt Commercial Paper (TECP). There are advantages and
2 disadvantages to each program; however, in my opinion TECP is the superior
3 option for NBC.
4

5 **Q. Can you describe in more detail the revenue bond option?**

6 A. Yes. The NBC has the legal authority to issue revenue bonds. The NBC, with
7 outside assistance, would need to go through the credit rating process, issue an
8 Official Statement, obtain insurance and market the bonds. The revenue bonds
9 would be more expensive than borrowing through the SRF due to the lack of an
10 interest rate subsidy. The summary sheets from the revenue bond model are
11 attached to my testimony as Exhibit MG-2.
12

13 One of the advantages of the revenue bond option, however, is the ability to lock-
14 in an interest rate. Today's market conditions are within 30 basis points of the
15 lowest interest rates in 40 years. As of November 6, 2002 it is likely that the
16 NBC would be able to obtain a simple interest rate of 4.2% with an annual
17 effective interest rate of approximately 4.4%.
18

19 **Q. Are there any other disadvantages to the use of revenue bonds?**

20 A. Yes. Revenue bond issuance would require significantly longer lead-time and
21 therefore would most likely require the NBC to borrow significantly more than it
22 needs in the short-term. It should also be noted that revenue bonds require the
23 funding of certain reserves not required under a TECP program.

1

2 **Q. Can you describe in more detail the TECP option?**

3 A. Yes. This option involves the issuance of short-term debt instruments (maturities
4 less than 270 days) that will ultimately be “taken out” with long-term SRF
5 funding as SRF capacity becomes available. The program could be
6 conceptualized as a credit line. The program would be sized to finance the
7 cumulative funding gap, which is presently estimated to be approximately \$100
8 million. As cash is needed, the commercial paper would be issued. The summary
9 sheets from the TECP model are attached as Exhibit MG – 3.

10

11 **Q. What are the advantages of the TECP program?**

12 A. There are a number of advantages to this type of cash flow financing. The major
13 advantage of TECP is the initial low cost and the subsequent take-out with
14 subsidized loans from the RICWFA. Based upon our model, the rate impacts are
15 significantly lower in the first few years. Incorporating the debt service from our
16 models, Walter Edge performed rate impact calculations that show that the overall
17 TECP program will result in rates that are lower than under the open market
18 model. See also Exhibit MG-4 for a graphical representation of the debt service
19 variance between the two programs.

20

21 In addition, one of the most significant advantages is that the NBC would not
22 need to borrow long-term and incur principal and interest costs prior to the actual
23 cash flow need. As mentioned in the testimony of Mr. Pratt and Mr. Brueckner,

1 cash flow projections are modified once projects have been contracted and may
2 also vary with the progress of a particular project. Once the program is
3 established, the NBC would essentially have a credit line that could be drawn
4 upon immediately and only at that point would the NBC incur interest costs.
5 In addition, the TECP program would allow the NBC to take advantage of short-
6 term interest rates that traditionally are significantly lower than the long-term
7 rates (see Exhibit MG-5).

8
9 One other advantage is that the TECP program will allow NBC to maximize the
10 amount of subsidized loans from the RICWFA. There is no penalty for pre-
11 payment so the NBC could rake out the TECP at any time should additional
12 subsidized funding become available. TECP allows for a better asset liability
13 match and acceptable ratios of short-term to long-term debt.

14

15 **Q. Are there any disadvantages to a TECP program?**

16 A. A TECP program is a variable rate program and therefore the NBC would be
17 exposed to some market risk both in the short term and should there be a
18 significant increase in interest rates that would force the NBC to permanently
19 (take-out) finance at higher levels than currently exist. Also, given the historic
20 low interest rates we are currently experiencing, it is possible that NBC may not
21 be able to secure these same low rates in the future. In my opinion, however, it is
22 likely that the subsidized SRF rates will generally be lower than the current open
23 market bond rates for the next five years. There is also the remote possibility of a

1 capital markets disruption that would impede the ability of the TECP to be
2 marketed for a long period of time.

3

4 **Q. What are some of the other requirements associated with the TECP**
5 **program?**

6 A. Although the specific legal requirements of the various types of financing options
7 under consideration by NBC are discussed in the testimony of Karen Grande, I
8 would like to take this opportunity to address those TECP legal issues that have
9 an “operational” and regulatory impact.

10

11 In order to establish the TECP program, the NBC would need a credit or liquidity
12 facility. Typically large international banks act as the liquidity facility provider
13 and also provide credit support to the commercial paper holders. In addition, they
14 would be available to purchase the TECP in the event of a failed remarketing.
15 The NBC would also need a Tender Agent and a Remarketing/Dealer Agent to
16 assist with the marketing of the TECP.

17

18 The NBC would also be required to go through the credit rating process up-front
19 and on an annual basis. Credit rating agencies have indicated that borrowers
20 should target having less than 25% of their debt in variable mode.

21 It is anticipated that the NBC program would cost \$175,000 to \$200,000 to
22 initially establish a program and then approximately 25 to 50 basis points
23 annually to sustain the program, depending upon the cost of liquidity.

1

2 **Q. Does the NBC need “automatic” rate increases in order to successfully**
3 **launch the TECP program?**

4 A. Yes. In order to establish a TECP program that is large enough to meet the
5 funding gap, investors and the liquidity facility provider must be confident that
6 NBC will ultimately have the ability to “take-out” the TECP long-term. If the
7 PUC were to authorize, for example, rates that are sufficient to cover only the
8 interest costs of the TECP, the TECP would not be marketable. Likewise, if the
9 PUC were to authorize rates that would recover principal and interest on long-
10 term debt of an amount less than the TECP program, the program would have to
11 be reduced or eliminated.

12

13 **Q. How were the models developed?**

14 A. The overall model is a Capital Improvement Program model designed to provide a
15 comprehensive look at funding sources and expenditures for the capital projects
16 over a multi-year period. Long-term debt is one of the major sources for
17 financing the projects and all the funding sources and uses are linked. The
18 iterative nature of the model allows us to solve for multiple components, within
19 prescribed constraints and given certain assumptions. The models that we
20 developed for this filing calculate debt service and debt service coverage that will
21 be required to finance the NBC’s five-year 2004 – 2008 capital program including
22 fiscal year 2003. In the case of open market bonds (revenue bonds), the model
23 assumes that the entire amount of the proceeds is available at the beginning of

1 each fiscal year. With respect to the TECP model, it is assumed that the TECP is
2 drawn down through out the fiscal year to meet cash flow needs. As the SRF
3 funding becomes available in later years, the TECP is taken out with the
4 subsidized loans. Cost of issuance and running the TECP program are reflected in
5 the Debt Service. The cost of issuance for the SRF and revenue bonds are also
6 shown as separate line items.

7
8 The model also calculates debt service coverage at 125% of all debt. The debt
9 service coverage from prior years is available to pay directly for capital items
10 traditionally purchased from the operating budget as well as for directly financing
11 the CIP. Please refer to the testimony of Walter Edge for additional discussion of
12 the treatment of the debt service coverage. These figures were then provided to
13 Mr. Edge for the purposes of calculating the rate increases under required
14 different financing scenarios.

15
16 **Q. Can you discuss NBC's current credit rating?**

17 A. The NBC recently went through the credit rating process with Standard and
18 Poor's (S&P) as part of the most recent borrowing from the RICWFA. We are
19 pleased to inform the PUC that the NBC was upgraded from an "A" to an "A+".
20 It is also worth noting that S&P expressed how important it was that the PUC and
21 the NBC's Board of Commissioners accepted the 125% debt service coverage
22 ratio. This was one of the primary factors behind the upgrade.

23

1 S&P also inquired about NBC's plans for financing the gap resulting from the
2 SRF capacity limitations and the NBC indicated that they were pursuing a TECP
3 program. The NBC also specifically mentioned the stormwater rate study and the
4 PUC order regarding the "Special Master."

5
6 **Q. What impact does a credit rating have on the ability to borrow and the cost**
7 **of borrowing?**

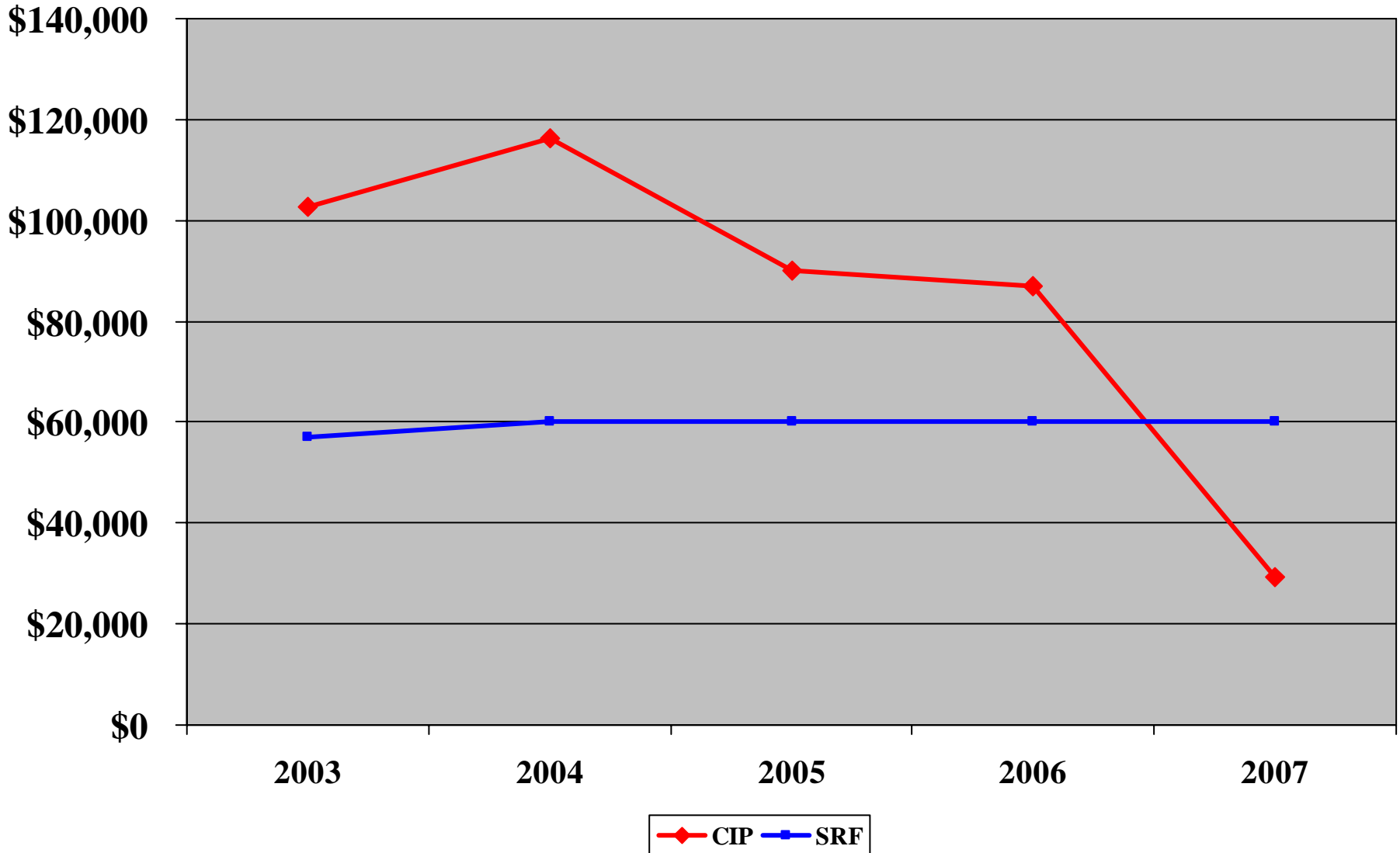
8 A. Generally, the higher the rating, the lower the interest cost. Investors and lenders
9 view municipal credit ratings as indicators of risk. The RICWFA, as the NBC's
10 primary lender is directly impacted by the NBC rating since the interest rate on
11 RICWFA bonds is a function of the strength of their underlying portfolio of loans
12 and the credit ratings of those borrowers.

13
14 **Q. Does this conclude your pre-filed testimony?**

15 A. Yes.

Financing Gap

(in 000's)



**Narragansett Bay Commission
Revenue Bond Model**

Exhibit MG-2

**NARRAGANSETT BAY COMMISSION
INDENTURE REQUIREMENTS
With Revenue Adjustment**

	FISCAL YEARS								
	2003	2004	2005	2006	2007	2008	2009	2010	2011
OPERATING REVENUES									
User Fees	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923
Permit and Constructions Fees	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530
Industrial Pretreatment	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704
Septage Income	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833
Abatement Fees	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Miscellaneous Revenue	\$536,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044
BOD/TSS Surcharge	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759
Revenue Adjustment	-	9,356,738	19,560,222	28,822,135	34,823,034	36,760,449	37,430,686	38,644,406	39,267,556
Compounded Growth on Revenue Adjustment	-	-	-	-	-	-	-	-	-
Total Operating Revenues	\$44,221,793	\$53,053,531	\$63,257,015	\$72,518,928	\$78,519,827	\$80,457,242	\$81,127,479	\$82,341,199	\$82,964,349
NONOPERATING REVENUES									
Interest Income	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000
Late Charge Penalty	520,000	625,000	625,000	625,000	625,000	625,000	625,000	625,000	625,000
Grant Revenue	1,465,608	-	-	-	-	-	-	-	-
Miscellaneous	362,678	-	-	-	-	-	-	-	-
Total NonOperating Revenues	\$ 2,628,286	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000
DISPOSITION OF REVENUES (Section 13)									
A. OPERATING EXPENSES									
Personnel Services	\$ 14,549,429	\$ 14,895,290	\$ 15,491,102	\$ 16,110,746	\$ 16,755,175	\$ 17,425,383	\$ 18,122,398	\$ 18,847,294	\$ 19,601,185
Special Services	2,696,987	2,571,850	2,661,865	2,755,030	2,851,456	2,951,257	3,054,551	3,161,460	3,272,111
Operating Supplies and Services	8,755,974	9,183,529	9,504,953	9,837,626	10,181,943	10,538,311	10,907,152	11,288,902	11,684,014
Total Operating Expenses	\$ 26,002,390	\$ 26,650,669	\$ 27,657,919	\$ 28,703,402	\$ 29,788,574	\$ 30,914,950	\$ 32,084,100	\$ 33,297,656	\$ 34,557,310
Pledged Revenue/Net Revenue	\$20,847,689	\$27,307,862	\$36,504,096	\$44,720,526	\$49,636,253	\$50,447,291	\$49,948,379	\$49,948,543	\$49,312,038
B. DEBT SERVICE									
SRF - Existing	10,292,405	11,113,187	10,979,763	11,260,376	11,422,020	11,403,033	10,901,503	10,906,666	10,407,012
SRF - Proposed	3,014,130	6,660,743	10,413,244	14,431,210	16,762,645	17,429,275	17,524,025	17,520,550	17,512,300
Total SRF Bond Debt Service:	13,306,535	17,773,930	21,393,007	25,691,586	28,184,665	28,832,308	28,425,528	28,427,216	27,919,312
Open Market - Existing	-	-	-	-	-	-	-	-	-
Open Market - Proposed	753,100	4,072,360	7,810,270	10,084,835	11,524,338	11,525,525	11,533,175	11,531,619	11,530,319
Total Open Market Bond Debt Service:	753,100	4,072,360	7,810,270	10,084,835	11,524,338	11,525,525	11,533,175	11,531,619	11,530,319
Total Bond Debt Service:	14,059,635	21,846,290	29,203,277	35,776,421	39,709,003	40,357,833	39,958,703	39,958,835	39,449,631
C. DEBT SERVICE - TECP	-	-	-	-	-	-	-	-	-
D. TOTAL DEBT SERVICE	14,059,635	21,846,290	29,203,277	35,776,421	39,709,003	40,357,833	39,958,703	39,958,835	39,449,631
EXCESS OF REVENUES OVER M&O AND DS REQUIREMENTS	<u>\$6,788,054</u>	<u>\$5,461,572</u>	<u>\$7,300,819</u>	<u>\$8,944,105</u>	<u>\$9,927,251</u>	<u>\$10,089,458</u>	<u>\$9,989,676</u>	<u>\$9,989,709</u>	<u>\$9,862,408</u>
Debt Coverage Ratio - TOTAL ALL FIXED RATE DEBT	1.48	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Debt Coverage Ratio - TOTAL ALL DEBT	1.48	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Debt Service Coverage Required	3,514,909	5,461,572	7,300,819	8,944,105	9,927,251	10,089,458	9,989,676	9,989,709	9,862,408
TOTAL REVENUE REQUIREMENT	43,576,934	53,958,531	64,162,015	73,423,928	79,424,827	81,362,242	82,032,479	83,246,199	83,869,349
Capital Projects Summary	102,723,000	116,238,000	90,035,000	86,921,000	29,148,000	11,590,000	0	0	0
Construction Financing Plan									
Sources of Funds									
New TECP	0	0	0	0	0	0	0	0	0
Bay Bonds	5,200,000	0	0	0	0	0	0	0	0
SRF Bonds	57,000,000	60,000,000	60,000,000	60,000,000	23,855,000	4,715,000	0	0	0
Open Market Bonds	36,825,000	50,890,000	28,055,000	23,050,000	0	0	0	0	0
Grants	1,659,392	2,500,000	0	0	0	0	0	0	0
Surplus Revs from Pre Year	<u>5,564,392</u>	<u>6,788,054</u>	<u>5,461,572</u>	<u>7,300,819</u>	<u>8,944,105</u>	<u>9,927,251</u>	<u>10,089,458</u>	<u>9,989,676</u>	<u>9,989,709</u>
Total Sources	106,248,784	120,178,054	93,516,572	90,350,819	32,799,105	14,642,251	10,089,458	9,989,676	9,989,709
Uses fo Funds									
Operating Capital	1,837,415	1,892,537	1,949,314	2,007,793	2,068,027	2,130,068	2,193,970	2,259,789	2,327,582
Capital Improvements	102,723,000	116,238,000	90,035,000	86,921,000	29,148,000	11,590,000	0	0	0
TECP Take Out	0	0	0	0	0	0	0	0	0
Debt Issuance Expense	<u>1,683,563</u>	<u>2,045,025</u>	<u>1,531,238</u>	<u>1,418,625</u>	<u>357,825</u>	<u>70,725</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Uses	106,243,978	120,175,562	93,515,551	90,347,418	31,573,852	13,790,793	2,193,970	2,259,789	2,327,582

**Narragansett Bay Commission
Revenue Bond Model**

Exhibit MG-2

**NARRAGANSETT BAY COMMISSION
INDENTURE REQUIREMENTS
With Revenue Adjustment**

	FISCAL YEARS								
	2012	2013	2014	2015	2016	2017	2018	2019	2020
OPERATING REVENUES									
User Fees	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923
Permit and Constructions Fees	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530
Industrial Pretreatment	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704
Septage Income	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833
Abatement Fees	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Miscellaneous Revenue	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044
BOD/TSS Surcharge	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759
Revenue Adjustment	39,937,449	40,709,161	41,476,233	42,334,142	43,217,821	44,187,376	45,215,823	46,288,271	47,436,972
Compounded Growth on Revenue Adjustment	-	-	-	-	-	-	-	-	-
Total Operating Revenues	\$83,634,242	\$84,405,954	\$85,173,026	\$86,030,935	\$86,914,614	\$87,884,169	\$88,912,616	\$89,985,064	\$91,133,765
NONOPERATING REVENUES									
Interest Income	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000
Late Charge Penalty	625,000	625,000	625,000	625,000	625,000	625,000	625,000	625,000	625,000
Grant Revenue	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Total NonOperating Revenues	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000
DISPOSITION OF REVENUES (Section 13)									
A. OPERATING EXPENSES									
Personnel Services	\$ 20,385,233	\$ 21,200,642	\$ 22,048,668	\$ 22,930,615	\$ 23,847,839	\$ 24,801,753	\$ 25,793,823	\$ 26,825,576	\$ 27,898,599
Special Services	3,386,635	3,505,168	3,627,848	3,754,823	3,886,242	4,022,260	4,163,040	4,308,746	4,459,552
Operating Supplies and Services	12,092,954	12,516,207	12,954,275	13,407,674	13,876,943	14,362,636	14,865,328	15,385,615	15,924,111
Total Operating Expenses	\$ 35,864,822	\$ 37,222,017	\$ 38,630,791	\$ 40,093,112	\$ 41,611,024	\$ 43,186,649	\$ 44,822,190	\$ 46,519,936	\$ 48,282,262
Pledged Revenue/Net Revenue	\$48,674,420	\$48,088,937	\$47,447,235	\$46,842,823	\$46,208,590	\$45,602,520	\$44,995,426	\$44,370,128	\$43,756,503
B. DEBT SERVICE									
SRF - Existing	9,897,161	9,421,268	8,923,619	8,425,477	7,919,866	7,439,185	6,941,922	6,441,102	5,952,009
SRF - Proposed	17,518,750	17,519,425	17,514,150	17,522,400	17,518,800	17,518,125	17,524,725	17,523,175	17,523,175
Total SRF Bond Debt Service:	27,415,911	26,940,693	26,437,769	25,947,877	25,438,666	24,957,310	24,466,647	23,964,277	23,475,184
Open Market - Existing	-	-	-	-	-	-	-	-	-
Open Market - Proposed	11,523,625	11,530,456	11,520,019	11,526,381	11,528,206	11,524,706	11,529,694	11,531,825	11,530,019
Total Open Market Bond Debt Service:	11,523,625	11,530,456	11,520,019	11,526,381	11,528,206	11,524,706	11,529,694	11,531,825	11,530,019
Total Bond Debt Service:	38,939,536	38,471,149	37,957,788	37,474,258	36,966,872	36,482,016	35,996,341	35,496,102	35,005,203
C. DEBT SERVICE - TECP	-	-	-	-	-	-	-	-	-
D. TOTAL DEBT SERVICE	38,939,536	38,471,149	37,957,788	37,474,258	36,966,872	36,482,016	35,996,341	35,496,102	35,005,203
EXCESS OF REVENUES OVER M&O AND DS REQUIREMENTS	\$9,734,884	\$9,617,787	\$9,489,447	\$9,368,565	\$9,241,718	\$9,120,504	\$8,999,085	\$8,874,026	\$8,751,301
Debt Coverage Ratio - TOTAL ALL FIXED RATE DEBT	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Debt Coverage Ratio - TOTAL ALL DEBT	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Debt Service Coverage Required	9,734,884	9,617,787	9,489,447	9,368,565	9,241,718	9,120,504	8,999,085	8,874,026	8,751,301
TOTAL REVENUE REQUIREMENT	84,539,242	85,310,954	86,078,026	86,935,935	87,819,614	88,789,169	89,817,616	90,890,064	92,038,765
Capital Projects Summary	0	0	0	0	0	0	0	0	0
Construction Financing Plan									
Sources of Funds									
New TECP	0	0	0	0	0	0	0	0	0
Bay Bonds	0	0	0	0	0	0	0	0	0
SRF Bonds	0	0	0	0	0	0	0	0	0
Open Market Bonds	0	0	0	0	0	0	0	0	0
Grants	0	0	0	0	0	0	0	0	0
Surplus Revs from Pre Year	<u>9,862,408</u>	<u>9,734,884</u>	<u>9,617,787</u>	<u>9,489,447</u>	<u>9,368,565</u>	<u>9,241,718</u>	<u>9,120,504</u>	<u>8,999,085</u>	<u>8,874,026</u>
Total Sources	9,862,408	9,734,884	9,617,787	9,489,447	9,368,565	9,241,718	9,120,504	8,999,085	8,874,026
Uses fo Funds									
Operating Capital	2,397,410	2,469,332	2,543,412	2,619,714	2,698,306	2,779,255	2,862,633	2,948,512	3,036,967
Capital Improvements	0	0	0	0	0	0	0	0	0
TECP Take Out	0	0	0	0	0	0	0	0	0
Debt Issuance Expense	0	0	0	0	0	0	0	0	0
Total Uses	2,397,410	2,469,332	2,543,412	2,619,714	2,698,306	2,779,255	2,862,633	2,948,512	3,036,967

Narragansett Bay Commission TECP Model

Exhibit MG-3

**NARRAGANSETT BAY COMMISSION
INDENTURE REQUIREMENTS**

With Revenue Adjustment

	FISCAL YEAR										
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
OPERATING REVENUES											
User Fees	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923
Permit and Constructions Fees	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530
Industrial Pretreatment	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704
Septage Income	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833
Abatement Fees	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Miscellaneous Revenue	\$536,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044
BOD/TSS Surcharge	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759
Revenue Adjustment	-	7,218,441	14,062,305	22,315,899	28,131,090	31,951,955	34,603,074	36,882,008	37,507,157	38,175,543	38,943,090
Compounded Growth on Revenue Adjustment	-	-	-	-	-	-	-	-	-	-	-
Total Operating Revenues	\$44,221,793	\$50,915,234	\$57,759,098	\$66,012,692	\$71,827,883	\$75,648,748	\$78,299,867	\$80,578,801	\$81,203,950	\$81,872,336	\$82,639,883
NONOPERATING REVENUES											
Interest Income	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000
Late Charge Penalty	520,000	625,000	625,000	625,000	625,000	625,000	625,000	625,000	625,000	625,000	625,000
Grant Revenue	1,465,608	-	-	-	-	-	-	-	-	-	-
Miscellaneous	362,678	-	-	-	-	-	-	-	-	-	-
Total NonOperating Revenues	\$ 2,628,286	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000
DISPOSITION OF REVENUES (Section 13)											
A. OPERATING EXPENSES											
Personnel Services	\$ 14,549,429	\$ 14,895,290	\$ 15,491,102	\$ 16,110,746	\$ 16,755,175	\$ 17,425,383	\$ 18,122,398	\$ 18,847,294	\$ 19,601,185	\$ 20,385,233	\$ 21,200,642
Special Services	2,696,987	2,571,850	2,661,865	2,755,030	2,851,456	2,951,257	3,054,551	3,161,460	3,272,111	3,386,635	3,505,168
Operating Supplies and Services	8,755,974	9,183,529	9,504,953	9,837,626	10,181,943	10,538,311	10,907,152	11,288,902	11,684,014	12,092,954	12,516,207
Total Operating Expenses	\$ 26,002,390	\$ 26,650,669	\$ 27,657,919	\$ 28,703,402	\$ 29,788,574	\$ 30,914,950	\$ 32,084,100	\$ 33,297,656	\$ 34,557,310	\$ 35,864,822	\$ 37,222,017
Pledged Revenue/Net Revenue	\$20,847,689	\$25,169,565	\$31,006,179	\$38,214,291	\$42,944,309	\$45,638,798	\$47,120,766	\$48,186,145	\$47,551,640	\$46,912,514	\$46,322,866
B. DEBT SERVICE											
SRF - Existing	10,292,405	11,113,187	10,979,763	11,260,376	11,422,020	11,403,033	10,901,503	10,906,666	10,407,012	9,897,161	9,421,268
SRF - Proposed	3,014,130	6,660,743	10,413,244	14,503,500	18,860,150	23,193,480	26,795,110	27,642,250	27,634,300	27,632,850	27,637,025
Total SRF Bond Debt Service:	13,306,535	17,773,930	21,393,007	25,763,876	30,282,170	34,596,513	37,696,613	38,548,916	38,041,312	37,530,011	37,058,293
Open Market - Existing	-	-	-	-	-	-	-	-	-	-	-
Open Market - Proposed	-	-	-	-	-	-	-	-	-	-	-
Total Open Market Bond Debt Service:	-	-	-	-	-	-	-	-	-	-	-
Total Bond Debt Service:	13,306,535	17,773,930	21,393,007	25,763,876	30,282,170	34,596,513	37,696,613	38,548,916	38,041,312	37,530,011	37,058,293
C. DEBT SERVICE - TECP	899,791	2,361,722	3,411,936	4,807,557	4,073,277	1,914,525	-	-	-	-	-
D. TOTAL DEBT SERVICE	14,206,326	20,135,652	24,804,943	30,571,433	34,355,447	36,511,038	37,696,613	38,548,916	38,041,312	37,530,011	37,058,293
EXCESS OF REVENUES OVER M&O AND DS REQUIREMENTS	\$6,641,363	\$5,033,913	\$6,201,236	\$7,642,858	\$8,588,862	\$9,127,760	\$9,424,153	\$9,637,229	\$9,510,328	\$9,382,503	\$9,264,573
Debt Coverage Ratio - TOTAL ALL FIXED RATE DEBT	1.57	1.42	1.45	1.48	1.42	1.32	1.25	1.25	1.25	1.25	1.25
Debt Coverage Ratio - TOTAL ALL DEBT	1.47	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Debt Service Coverage Required	3,551,581	5,033,913	6,201,236	7,642,858	8,588,862	9,127,760	9,424,153	9,637,229	9,510,328	9,382,503	9,264,573
TOTAL REVENUE REQUIREMENT	43,760,297	51,820,234	58,664,098	66,917,692	72,732,883	76,553,748	79,204,867	81,483,801	82,108,950	82,777,336	83,544,883
Capital Projects Summary	102,723,000	116,238,000	90,035,000	86,921,000	29,148,000	11,590,000	0	0	0	0	0
Construction Financing Plan											
Sources of Funds											
New TECP	35,991,631	49,889,174	27,850,401	23,627,557	0	0	0	0	0	0	0
Bay Bonds	5,200,000	0	0	0	0	0	0	0	0	0	0
SRF Bonds	57,000,000	60,000,000	60,000,000	60,000,000	60,000,000	60,000,000	47,865,000	0	0	0	0
Open Market Bonds	0	0	0	0	0	0	0	0	0	0	0
Grants	1,659,392	2,500,000	0	0	0	0	0	0	0	0	0
Surplus Revs from Pre Year	5,564,392	6,641,363	5,033,913	6,201,236	7,642,858	8,588,862	9,127,760	9,424,153	9,637,229	9,510,328	9,382,503
Total Sources	105,415,415	119,030,537	92,884,314	89,828,793	67,642,858	68,588,862	56,992,760	9,424,153	9,637,229	9,510,328	9,382,503
Uses fo Funds											
Operating Capital	1,837,415	1,892,537	1,949,314	2,007,793	2,068,027	2,130,068	2,193,970	2,259,789	2,327,582	2,397,410	2,469,332
Capital Improvements	102,723,000	116,238,000	90,035,000	86,921,000	29,148,000	11,590,000	0	0	0	0	0
TECP Take Out	0	0	0	0	35,526,831	53,968,794	47,863,137	0	0	0	0
Debt Issuance Expense	855,000	900,000	900,000	900,000	900,000	900,000	717,975	0	0	0	0
Total Uses	105,415,415	119,030,537	92,884,314	89,828,793	67,642,858	68,588,862	50,775,082	2,259,789	2,327,582	2,397,410	2,469,332

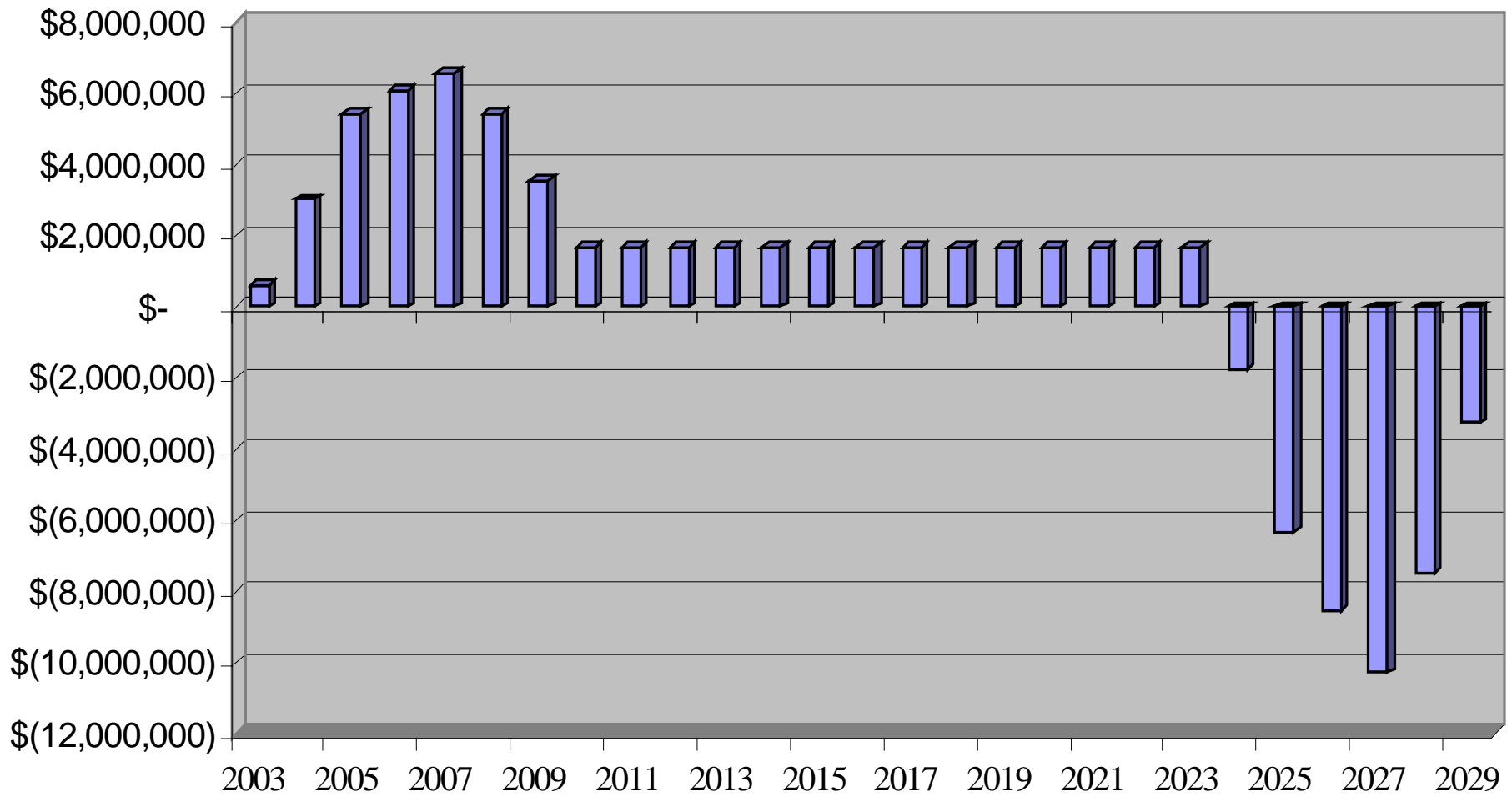
**Narragansett Bay Commission
TECP Model**

Exhibit MG-3

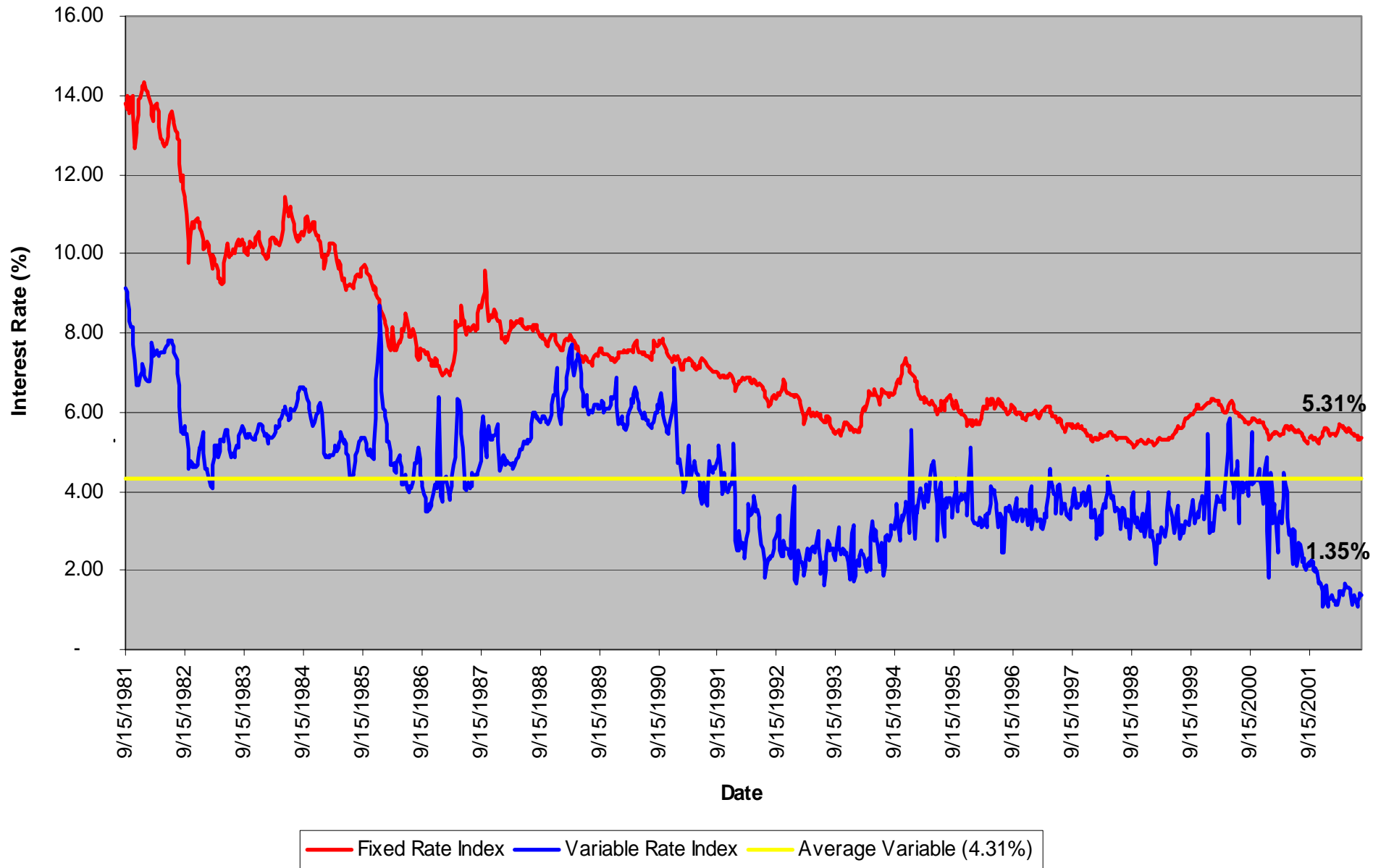
**NARRAGANSETT BAY COMMISSION
INDENTURE REQUIREMENTS
With Revenue Adjustment**

	FISCAL YEAR						
	2014	2015	2016	2017	2018	2019	2020
OPERATING REVENUES							
User Fees	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923	\$41,715,923
Permit and Constructions Fees	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530	\$59,530
Industrial Pretreatment	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704	\$1,081,704
Septage Income	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833	\$689,833
Abatement Fees	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Miscellaneous Revenue	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044	\$11,044
BOD/TSS Surcharge	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759	\$136,759
Revenue Adjustment	39,722,459	40,566,290	41,454,313	42,428,243	43,443,581	44,517,740	45,671,074
Compounded Growth on Revenue Adjustment	-	-	-	-	-	-	-
Total Operating Revenues	\$83,419,252	\$84,263,083	\$85,151,106	\$86,125,036	\$87,140,374	\$88,214,533	\$89,367,867
NONOPERATING REVENUES							
Interest Income	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000	\$ 280,000
Late Charge Penalty	625,000	625,000	625,000	625,000	625,000	625,000	625,000
Grant Revenue	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-
Total NonOperating Revenues	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000	\$ 905,000
DISPOSITION OF REVENUES (Section 13)							
A. OPERATING EXPENSES							
Personnel Services	\$ 22,048,668	\$ 22,930,615	\$ 23,847,839	\$ 24,801,753	\$ 25,793,823	\$ 26,825,576	\$ 27,898,599
Special Services	3,627,848	3,754,823	3,886,242	4,022,260	4,163,040	4,308,746	4,459,552
Operating Supplies and Services	12,954,275	13,407,674	13,876,943	14,362,636	14,865,328	15,385,615	15,924,111
Total Operating Expenses	\$ 38,630,791	\$ 40,093,112	\$ 41,611,024	\$ 43,186,649	\$ 44,822,190	\$ 46,519,936	\$ 48,282,262
Pledged Revenue/Net Revenue	\$45,693,461	\$45,074,971	\$44,445,083	\$43,843,388	\$43,223,184	\$42,599,596	\$41,990,605
B. DEBT SERVICE							
SRF - Existing	8,923,619	8,425,477	7,919,866	7,439,185	6,941,922	6,441,102	5,952,009
SRF - Proposed	27,631,150	27,634,500	27,636,200	27,635,525	27,636,625	27,638,575	27,640,475
Total SRF Bond Debt Service:	36,554,769	36,059,977	35,556,066	35,074,710	34,578,547	34,079,677	33,592,484
Open Market - Existing	-	-	-	-	-	-	-
Open Market - Proposed	-	-	-	-	-	-	-
Total Open Market Bond Debt Service:	-	-	-	-	-	-	-
Total Bond Debt Service:	36,554,769	36,059,977	35,556,066	35,074,710	34,578,547	34,079,677	33,592,484
C. DEBT SERVICE - TECP	-	-	-	-	-	-	-
D. TOTAL DEBT SERVICE	36,554,769	36,059,977	35,556,066	35,074,710	34,578,547	34,079,677	33,592,484
EXCESS OF REVENUES OVER M&O AND DS REQUIREMENTS	\$9,138,692	\$9,014,994	\$8,889,017	\$8,768,678	\$8,644,637	\$8,519,919	\$8,398,121
Debt Coverage Ratio - TOTAL ALL FIXED RATE DEBT	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Debt Coverage Ratio - TOTAL ALL DEBT	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Debt Service Coverage Required	9,138,692	9,014,994	8,889,017	8,768,678	8,644,637	8,519,919	8,398,121
TOTAL REVENUE REQUIREMENT	84,324,252	85,168,083	86,056,106	87,030,036	88,045,374	89,119,533	90,272,867
Capital Projects Summary	0	0	0	0	0	0	0
Construction Financing Plan							
Sources of Funds							
New TECP	0	0	0	0	0	0	0
Bay Bonds	0	0	0	0	0	0	0
SRF Bonds	0	0	0	0	0	0	0
Open Market Bonds	0	0	0	0	0	0	0
Grants	0	0	0	0	0	0	0
Surplus Revs from Pre Year	9,264,573	9,138,692	9,014,994	8,889,017	8,768,678	8,644,637	8,519,919
Total Sources	9,264,573	9,138,692	9,014,994	8,889,017	8,768,678	8,644,637	8,519,919
Uses fo Funds							
Operating Capital	2,543,412	2,619,714	2,698,306	2,779,255	2,862,633	2,948,512	3,036,967
Capital Improvements	0	0	0	0	0	0	0
TECP Take Out	0	0	0	0	0	0	0
Debt Issuance Expense	0	0	0	0	0	0	0
Total Uses	2,543,412	2,619,714	2,698,306	2,779,255	2,862,633	2,948,512	3,036,967

Debt Service Variance



Revenue Bond Buyer Index vs BMA Index 21-Year History (1981-2002)



1 **NARRAGANSETT BAY COMMISSION**

2
3 **PRE-FILED DIRECT TESTIMONY**
4 **OF KAREN S. GRANDE**
5
6

7 **Q. Please state your name.**

8 A. My name is Karen S. D. Grande.
9

10 **Q. Could you please describe your education and employment background?**

11 A. I have a bachelor's degree from Syracuse University and a juris doctor from Suffolk
12 University Law School. I am a partner in the law firm of Tillinghast Licht Perkins Smith
13 & Cohen, LLP, 10 Weybosset Street, Providence, Rhode Island. I joined the firm in 1987
14 and have focused my practice in the area of public finance since that time. I have served
15 as bond counsel to 23 of Rhode Island's 39 cities and towns, as well as many state and
16 municipal agencies, which finance public projects, including public water supply and
17 wastewater projects.
18

19 **Q. Do you hold any special licenses or certifications?**

20 A. I am licensed to practice law in Rhode Island and Massachusetts. Although I have
21 focused by practice in the area of public finance, neither the State of Rhode Island nor the
22 Commonwealth of Massachusetts has a procedure for certification of specialization. I am
23 a member of the Rhode Island Bar Association, the National Association of Bond
24 Lawyers and an associate member of the Rhode Island Government Finance Officer's
25 Association.
26

27 **Q. What is your relationship with the Narragansett Bay Commission (NBC)?**

28 A. My firm has served as bond counsel to the NBC for the last 16 years. In this capacity we
29 have assisted the NBC with the issuance of several user fee anticipation notes, revenue

1 notes, and nine (9) loans from the Rhode Island Clean Water Finance Agency
2 (RICWFA). I have worked on NBC financings since 1994.

3
4 **Q. What is the purpose of your testimony?**

5 A. My testimony serves to clarify the different legal requirements associated with the capital
6 financing options that the NBC has presented to the Public Utilities Commission (PUC)
7 for consideration as part of this filing.

8
9 **Q. Have you testified previously before the PUC?**

10 A. I have appeared before the PUC in connection with rate filings for the Kent County
11 Water Authority and the Pawtucket Water Supply Board.

12
13 **Q. What are the capital financing options?**

14 A. Historically the NBC has financed its capital program through low interest loans from the
15 RICWFA. The NBC's capital financing options presented to the PUC include the
16 continued use of loans from the RICWFA, along with either the issuance of publicly
17 offered fixed-rate revenue bonds or the establishment of a Variable Rate Demand
18 Obligation (VRDO) program in Tax Exempt Commercial Paper (TECP) mode.

19
20 **Q. What are the differences in the legal requirements of these three funding**
21 **mechanisms?**

22 A. All three programs are technically revenue bonds, that is, the sole source of payment is
23 revenues collected by the NBC. Exhibit KSG – 1 attached to my testimony presents the
24 different legal considerations for each of the funding options in a matrix format. Since the
25 NBC has several loans from the RICWFA, I would like to highlight the most significant
26 changes resulting from borrowing under a publicly offered fixed-rate revenue bond or
27 VRDO program rather than RICWFA loans. The major differences include: permissible

1 maturities, prepayment provisions, the requirement of a trust indenture, requirement of
2 trustee-held revenues and funds, required reserves, rate covenants, and the requirement of
3 a liquidity facility.

4 **Permissible Maturities**

5 With respect to maturities, the existing RICWFA program limits the length of loans to 20
6 years. With a publicly offered fixed-rate revenue bond or a VRDO program, the maturity
7 of the debt may be as long as 50 years, the maximum period permitted by NBC's enabling
8 legislation. Although it is not likely that a publicly offered fixed-rate revenue bond or
9 VRDO with a 50-year maturity would be marketable, either type of obligation would
10 allow NBC the flexibility to issue debt with maturities of 30 years, potentially mitigating
11 rate impacts.

12 **Prepayment**

13 The NBC may only prepay loans from the RICWFA with RICWFA approval. The
14 prepayment will be subject to a penalty based upon the resulting financial impact on
15 RICWFA. Publicly offered fixed-rate revenue bonds typically have a call provision
16 which permits the issuer to redeem bonds, usually after 10 years. Payment of a
17 redemption premium may be required. The VRDO program in TECP mode allows for
18 the prepayment of the debt at the end of each interest period without any penalty or
19 premium. Interest periods are set at between 1 and 270 days.

20 **Trust Indenture**

21 A trust indenture is a contract between an issuer and a bond trustee for the benefit of
22 bondholders. It is a lengthy document and typically sets forth the flow of funds, reserve
23 requirements, rate covenants and the bond lien status, among other things. To date, the
24 NBC has not been required to enter into a formal trust indenture on any of its borrowings.
25 Loans from the RICWFA have been executed through a loan agreement secured by a
26 bond issued by NBC. In order to issue either publicly offered fixed-rate revenue bonds or
27 VRDOs, the NBC would be required to execute a trust indenture.

1 **Trustee**

2 A trust indenture would also require the services of a corporate trustee to carry out certain
3 provisions of the indenture, including the proper funding of funds and accounts and the
4 disbursement of monies.

5
6 **Q. What funds and accounts are normally established pursuant to a trust indenture?**

7 A. Typical funds and accounts established under a trust indenture for a public utility include
8 the following Funds: Revenue Fund, Operations and Maintenance Fund, Debt Service
9 Fund with a Stabilization Account, Rebate Fund, Debt Service Reserve Fund, Operation
10 and Maintenance Reserve Fund, Renewal and Replacement Reserve Fund, and a General
11 Fund.

12
13 **Q. What is the flow of revenues through these funds and accounts and at what levels
14 must reserves be funded?**

15 A. A typical indenture provides that revenues shall be applied as follows:

16 All revenues except proceeds of property-loss insurance and condemnation, proceeds of
17 any sale or other disposition of any part of the system, and earnings on investment of the
18 funds and accounts are transferred to the trustee for deposit in the Revenue Fund no less
19 than monthly.

20 On the last business day of each month the Trustee is required to apply amounts in the
21 Revenue Fund to the following purposes and in the following order:

- 22 (1) To the issuer for deposit in the Operation and Maintenance Fund, the amount
23 requested for operating expenses for the next month (based on a budget filed with
24 Trustee);
- 25 (2) To the Debt Service Fund, an amount equal to the Debt Service Fund
26 Requirement as of the first day of the next month (usually 1/12 of next principal
27 and 1/6 of next interest payment);

- 1 (3) To the Rebate Fund, the amount, if any, necessary to meet the Rebate
2 Requirement (this is necessary only if the issuer earns investment income on bond
3 proceeds in excess of what is permitted by the Internal Revenue Code and is
4 usually funded from the interest income);
- 5 (4) To the Debt Service Reserve Fund, the amount, if any, necessary to meet the Debt
6 Service Reserve Fund Requirement (the lesser of (i) ten percent of the stated
7 principal amount of all bonds outstanding, (ii) the maximum annual Debt Service
8 Requirement in the current or any future fiscal year on all bonds outstanding, or
9 (iii) one hundred twenty five percent (125%) of the average annual Debt Service
10 Requirement for all bonds outstanding);
- 11 (5) To the Stabilization Account of the Debt Service Fund, amounts restricted by a
12 PUC order for debt service;
- 13 (6) To the Operation and Maintenance Reserve Fund, the amount, if any, necessary to
14 meet the Operation and Maintenance Reserve Fund Requirement (an amount
15 equal to 25% of the amount budgeted for operation and maintenance each year);
- 16 (7) To the Renewal and Replacement Reserve Fund, the amount, if any, necessary to
17 meet the Renewal and Replacement Reserve Fund Requirement (an amount equal
18 to one percent (1%) of the depreciated value of the system as shown on the
19 issuer's financial statements); and
- 20 (8) To such other funds or accounts established by the issuer in compliance with
21 applicable law or required by any rate order.

22 Any balance remaining in the Revenue Fund following the above payments is retained in
23 the Revenue Fund to be available for payments in the succeeding months; provided that if
24 the issuer has issued revenue anticipation notes, amounts in the Revenue Fund remaining
25 may be used to pay such notes.

1 On the last business day of each fiscal year the balance of the Revenue Fund is
2 withdrawn and deposited in the General Fund, to be used for any lawful purpose of the
3 issuer.

4 **Rate Covenant**

5 One of the major covenants in an indenture is the minimum debt service coverage ratio.
6 The debt service coverage ratio is the ratio of pledged revenues available to pay debt
7 service to the annual debt service requirement. The NBC's loan agreements with the
8 RICWFA require that NBC maintain a debt service coverage ratio of 115%.
9 Notwithstanding this covenant with RICWFA, the NBC's Board of Commissioners and
10 the PUC, based upon recommendations from credit rating agencies, have adopted a more
11 conservative and traditional debt service coverage ratio of 125%. The RICWFA requires
12 the NBC to maintain a rating in the "A" category with Standard & Poor's Rating Service.
13 Since Standard & Poor's requires a debt service coverage ratio in the range of 125% for
14 such a rating, the RICWFA, as a practical matter, requires 125% as well. A typical trust
15 indenture would include a rate covenant that would contractually require the NBC to
16 maintain a 125% debt service coverage ratio.

17 **Liquidity Facility**

18 As mentioned in the testimony of Maureen Gurghigian, a VRDO program in TECP mode
19 would require a liquidity facility. The purpose of a liquidity facility is to ensure that
20 funds are available to pay VRDO bondholders principal and interest due in the event such
21 bondholders tender their bonds for payment, which they are permitted to do at the end of
22 each interest period. Typical liquidity facilities are Letters of Credit or Standby Bond
23 Purchase Agreements. These facilities would not be required for loans from RICWFA or
24 publicly offered fixed-rate revenue bonds.

25
26 **Q. From a legal standpoint, are there any advantages to using publicly offered fixed-**
27 **rate revenue bonds vs. the VRDO program in TECP mode?**

1 A. The primary benefit to using publicly offered fixed-rate revenue bonds is the ability to
2 lock in a fixed interest rate, and currently interest rates are at historic lows. The VRDO
3 program in TECP mode offers maximum flexibility to NBC and offers the greatest
4 potential benefit to ratepayers. If publicly offered fixed-rate bonds are issued from the
5 outset, the NBC and its ratepayers are locked into fixed-rates for at least seven to ten
6 years (the first optional redemption date). In addition, under current tax law, an issuer is
7 only allowed to refinance fixed-rate bonds once prior to the first optional redemption
8 date. Under the plan of finance NBC has developed with its fiscal advisor, the NBC
9 would issue VRDOs in TECP Mode, and then, as RICWFA has available capacity, NBC
10 would refinance the VRDO with RICWFA loans. Thus NBC would initially be paying
11 lower short-term rates and low subsided interest rates later.

12
13 **Q. Does this conclude your pre-filed testimony?**

14 A. Yes.

**Comparison of Typical RICWFA Loans vs
Public Offerings and Commercial Paper Program**

Exhibit KSG-1

	Currently RICWFA Direct or Pooled Loans	Public Offering Bonds	Commercial Paper Program
Interest Rate	Approximately \$140M to be issued at the Zero Subsidized Rate (50% Zero interest - 50% Subsidized Rate) Zero Subsidized Rate (1/2 of Subsidized Rate) may be increased under certain circumstances to Subsidized Rate (66 2/3% of Market Rate) which may be increased under certain circumstances to Market Rate	Fixed Rate or Variable Rate priced at Market rates	Commercial Paper Rate
Interest Payable	Pay interest only on principal of the Loan advanced or deemed to be advanced	Pay interest from date of issuance on entire principal amount	Pay interest from date of issuance on entire principal amount
Maturity	Up to 20 years	Up to 50 years	Up to 50 years
Prepayment	Prepayment only with consent of RICWFA Prepayment penalty based on financial impact to RICWFA	Typically 10 yr call @ price of 100% Premium may be required	May be prepaid at end of each Interest Period 1-270 days without penalty or premium
Revenue Bonds Issued	Yes - RICWFA is the Bondholder	Yes	Yes
Local Interest Subsidy Trust Fund	Yes - NBC may have to pay higher rate of interest if other borrowers default	No	No
Trust Indenture	No	Yes	Yes
Loan Agreement	Yes	No	No

**Comparison of Typical RICWFA Loans vs
Public Offerings and Commercial Paper Program**

Exhibit KSG-1

	Currently RICWFA Direct or Pooled Loans	Public Offering Bonds	Commercial Paper Program
Revenue Pledge	Yes	Yes	Yes
Revenues & Funds & Accounts held by	NBC	Trustee (except for Operating Fund, Rebate Fund and Unrestricted Fund)	Trustee (except for Operating Fund, Rebate Fund and Unrestricted Fund)
Lien Status	Currently, Senior lien on revenues	Senior Lien Bonds or Subordinate Lien Bonds	Senior Lien Bonds or Subordinate Lien Bonds
PUC Approval of rates	Yes	Yes	Yes
Rate Covenant	115% of Debt Service* <i>*S&P requires 125%</i>	125% of Debt Service	125% of Debt Service
Division of PUC Approval of Debt	Yes	Yes	Yes
Debt Service Reserve Fund	No	Yes	Likely not required
Distribution of Project Funds	Requisition from Agency Trustee w/ DEM approval	Requisition from NBC Trustee	Requisition from NBC Trustee
Liquidity Facility - Letters of Credit or Standby Purchase Agreement	No	Fixed Rate - No Variable Rate - Yes	Yes

1 **NARRAGANSETT BAY COMMISSION**

2
3 **PRE-FILED DIRECT TESTIMONY**
4 **OF ANTHONY B. SIMEONE**
5
6
7
8

9 **Q. Please state your name and address**

10 A. Anthony B. Simeone. My business address is the Rhode Island Clean Water
11 Finance Agency (RICWFA), The Foundry, Suite 119, 235 Promenade Street,
12 Rhode Island.
13

14 **Q. For whom are you employed and what is your position?**

15 A. I am employed by the RICWFA as its Executive Director.
16

17 **Q. For how long have you been so employed?**

18 A. Since June 1994.
19

20 **Q. Have you previously testified before Public Utilities Commission?**

21 A. Yes. I have provided testimony in prior hearings regarding the Narragansett Bay
22 Commission (NBC) and other borrowers.
23

24 **Q. What is the purpose of your testimony?**

25 A. To provide additional information regarding the financing capacity of the SRF
26 program.
27

1

2 **Q. Can you describe what factors influence RICWFA's financing capacity?**

3 A. The RICWFA's financing ability is based upon the amount of federal and state
4 capitalization grants and the income stream from prior loans. In addition, as a
5 state agency we must ensure that all borrowers have an opportunity to take
6 advantage of the low-interest loan program. In addition to the NBC, a number of
7 other borrowers are constructing large capital improvements. The needs of other
8 borrowers must be taken into consideration.

9

10 This spring we began working with our underwriters, staff, financial advisor and
11 other consultants to fine-tune various models in order to determine the agency's
12 lending capacity taking into consideration interest rates, federal capitalization
13 grants, state funding and the needs of other borrowers.

14

15 It is important to keep in mind that the program is extremely interest rate
16 sensitive. For example, the borrower provides us with a draw-down schedule that
17 is used in the preparation of the Guaranteed Investment Contract (GIC) for
18 investment of the proceeds. Once the borrower begins to draw down the funds we
19 can access the federal funds and fund the Local Interest Subsidy Trust (LIST) and
20 initiate the subsidy. On our most recent loan to the NBC we were able to
21 successfully market the construction fund GIC but not the LIST GIC. As a result,
22 twelve (12) year treasuries were the investment vehicle selected for the LIST.
23 Unfortunately, as the debt service is paid off, the LIST funds can't be deallocated

1 and recycled into loans because of the 12 year commitment. This, in turn, limits
2 our capacity.

3

4 **Q. Has anything specifically happened that has impacted the financing capacity**
5 **of the RICWFA?**

6 A. We have been working with the NBC to address their long-term financing and
7 cash flow needs. Needs of the NBC and other borrowers have increased over the
8 last few years. In addition, the historically low interest rates have adversely
9 impacted our investment income stream.

10

11 **Q. Barring any additional federal capitalization grants, how much do you think**
12 **will be available for loans to NBC?**

13 A. Based on the bond referendum passed by the voters of Rhode Island, and the
14 resulting “blended rate” program that we developed, the NBC is entitled to a
15 minimum of an additional \$83 million in blended rate loans over the next two
16 years. Overall, however, we anticipate that we will be able to loan the NBC \$60
17 million a year for the next two years.

18

19 **Q. What do you think of the NBC’s financing model that assumes the RICWFA**
20 **will be able to loan them \$60 million per year for the next five years?**

21 A. Our original capacity analysis did not assume any additional federal capitalization
22 grants. We are fairly confident that additional federal capitalization grants will be
23 forthcoming and anticipate that we will be able to make loans to NBC at the \$60

1 million annual level. The RICWFA has received the federal capitalization grants
2 annually and it is anticipated that this will continue given the magnitude and
3 significance of this federal program..
4

5 **Q. Does this conclude your pre-filed testimony?**

6 A. Yes.
7

1
2 **NARRAGANSETT BAY COMMISSION**

3
4 **PRE-FILED DIRECT TESTIMONY**
5 **OF JUAN MARISCAL**
6

7
8 **Q. Please state your name and address.**

9 A. Juan Mariscal. My business address is The Narragansett Bay Commission, One
10 Service Rd., Providence, Rhode Island, 02905.
11

12 **Q. For whom are you employed, and in what position?**

13 A. I am employed by NBC as Director of the Planning, Policy and Regulation
14 Division. As the Director of this Division, I oversee the permitting, pretreatment,
15 laboratory, pollution prevention and environmental monitoring & data analysis
16 sections.
17

18 **Q. For how long have you been so employed?**

19 A. I have had this title since 1998. I have been employed by the Narragansett Bay
20 Commission (NBC) since 1980 and have had various titles with similar job
21 functions.
22

23 **Q. What are your educational and professional credentials?**

24 A. I've earned two degrees from the University of Rhode Island; a Bachelor's degree
25 in Civil Engineering and a Master's Degree in Civil and Environmental
26 Engineering. I am also a registered Professional Engineer in the State of Rhode
27 Island. I have over 30 years of experience in engineering and planning.

1 **Q. To whom do you report in your position as Director of the Planning, Policy**
2 **and Regulation Division?**

3 A. I report to the Executive Director of NBC through its Deputy Director.

4

5 **Q. Have you testified before the Rhode Island Public Utilities Commission**
6 **(PUC) previously?**

7 A. Yes, I have testified on behalf of NBC in several previous Dockets.

8

9 **Q. What is the purpose of your testimony?**

10 A. The purpose of my testimony is to provide the PUC with information on the
11 background and funding requirements of NBC's Environmental Monitoring &
12 Data Analysis Section (EMDA) and NBC's Sampling, Testing and Analysis of
13 Rivers (STAR) Project.

14

15 **Q. What are the present functions of the EMDA section?**

16 A. Two primary activities of EMDA center on sampling and monitoring at the Fields
17 Point and Bucklin Point Wastewater Treatment Facilities (WWTFs), and
18 sampling permitted industrial discharge to the NBC collection system. The
19 information obtained at the WWTFs is evaluated by EMDA staff to define short
20 and long term trends, assist in defining and correcting operational problems and
21 preparing special reports to Environmental Protection Agency (EPA), Department
22 of Environmental Management (DEM) and the public. Information obtained from
23 industrial sampling is used to determine compliance with NBC discharge limits as

1 part of its EPA-mandated pretreatment program. This monitoring occurs in
2 several locations. Urban rivers and the Upper Bay are sampled to assist in
3 identifying maintenance issues with Combined Sewer Overflows (CSOs) and to
4 develop background data in support of the CSO abatement project. This sampling
5 allows EMDA to monitor the activity of CSOs in the upper Bay, as well as build a
6 baseline on which to compare improvements to water quality as the CSO
7 abatement project moves ahead. Ongoing sampling also occurs at the Lincoln
8 Septage Station to determine compliance with NBC regulations, as well as
9 residential manholes and major pumping stations, to determine levels of
10 pollutants entering NBC's collection system. EMDA staff also monitor wells to
11 determine ground water quality and the receiving waters to determine background
12 water quality conditions. This monitoring of WWTF's and the NBC collection
13 system serves to ensure the quality of effluent discharged to Narragansett Bay.

14
15 Besides routine regulatory sampling, the EMDA staff also participates in
16 enforcement surveillance sampling of sewer users, sometimes involving other
17 agencies such as the Rhode Island Department of Environmental Management (RI
18 DEM), the United States Environmental Protection Agency (US EPA), and the
19 Federal Bureau of Investigation (FBI).

20
21 Over the past few years EMDA staff have also been involved with several
22 research projects to determine the levels of metals in potable water, to measure

1 dissolved oxygen levels in the Providence River during hypoxic events and to
2 assist Operations and Engineering staff with testing new equipment or facilities.
3 Finally, EMDA has, over the past two years, been monitoring concentrations of
4 nutrients, metals, and other critical water quality parameters in the Providence and
5 Seekonk Rivers as part of a new initiative called the STAR project (Sampling,
6 Testing and Analysis of Rivers). This monitoring is performed continuously
7 through two in-water stations equipped with state-of-the-art Sondes (monitoring
8 devices that record data such as: temperature, salinity, dissolved oxygen, and
9 chlorophyll), as well as periodically by EMDA staff on location. This project will
10 be discussed in more detail in the following sections.

11

12 The EMDA staff are responsible for analyzing the data obtained from the
13 laboratory analysis of the approximately 18,000 samples collected each year. The
14 staff also analyze data from the physical measurements collected at three
15 continuous monitoring stations, and the data gathered as part of approximately 12
16 special monitoring studies conducted each year. The EMDA section provides
17 trend and other scientific analysis of data collected. These analyses are provided
18 to NBC operations, and regulatory and management staff to assist in immediate,
19 short-term and long-term decision-making affecting daily operations, facilities
20 planning, enforcement actions and agency policy direction.

21

1 All of the monitoring activities conducted by the NBC are required by RI DEM
2 and EPA as part of NBC's permit to discharge to the Providence and Seekonk
3 Rivers.

4

5

6 **Q. How has the function of the NBC's Environmental Monitoring and Data**
7 **Analysis (EMDA) section evolved?**

8 A. The NBC's Rhode Island Pollution Discharge Elimination System (RIPDES)
9 permit requires NBC to have in place a pretreatment program to ensure that users
10 do not discharge pollutants into our sewer system and, ultimately, Narragansett
11 Bay. NBC's RIPDES permits establish discharge limits for a number of
12 parameters such as metals, cyanide, etc. These discharge limits and other federal
13 requirements are translated by NBC into discharge limits and other regulatory
14 requirements for the users of NBC sewerage system. The pretreatment program
15 includes NBC permitting, sampling and testing the effluent of users to ensure that
16 they are in compliance with their NBC-issued discharge permits.

17

18 When NBC merged with the former Blackstone Valley District Commission in
19 1992 each agency had its own pretreatment section. Subsequent to the merger,
20 the permitting and regulatory functions were separated from the sampling
21 function. One pretreatment section was created and the sampling functions
22 became the responsibility of what is now the Environmental Monitoring and Data
23 Analysis (EMDA) section of NBC.

1

2 The initial function of EMDA was the sampling of permitted users and
3 surveillance manholes. At that time, about 300 user samples and 100 manhole
4 samples were taken annually.

5

6 In the RIPDES permits issued to the Bucklin Point (1990) and Field's Point
7 (1992) Wastewater Treatment Facilities, DEM established discharge limits for
8 metals and other toxics that the facilities were not capable of meeting. As a result,
9 NBC entered into consent agreements with DEM which allowed the facilities to
10 discharge at their existing discharge concentrations, but also required that that a
11 number of special studies be completed to define the sources of the pollutant
12 loadings for each parameter for which discharge limits could not be achieved.
13 These studies required NBC to develop a toxics compliance plan, which also
14 necessitated the completion of several different sampling studies to define the
15 sources of pollutant discharges (i.e. drinking water, residential sources, etc.) to the
16 sewer system, as well as define pollutant loadings in the receiving waters (i.e.
17 Providence and Seekonk Rivers). Other studies required the evaluation of
18 pretreatment, and pollution prevention activities of NBC. NBC was required to
19 examine the relationship between dissolved and total metals and other scientific
20 analyses of the rivers and effluent.

21

22 Several studies were initiated, completed, and submitted to DEM. Some studies
23 are on-going. These studies established the basis for NBC continuing to define

1 pollutant sources and loadings to the river so as to impact future operational,
2 management, regulatory and capital needs of the NBC facilities and support
3 programs (i.e. laboratory, pretreatment, EMDA, etc.)
4

5 In July of 1996, EPA issued a guidance document, “Method 1669, Sampling
6 Ambient Water for Trace Metals at EPA Water Quality Criteria Levels”, often
7 referred to as “clean sampling”. This document states “ Preventing ambient water
8 samples from becoming contaminated during the sampling and analytical process
9 is the greatest challenge faced in trace metals determinations. In recent years, it
10 has been shown that much of the historical trace metals data collected in ambient
11 water are erroneously high because the concentrations reflect contamination from
12 sampling and analysis rather than ambient levels.” For example, materials used in
13 the manufacturing of glassware, chemical reagents and clothing, etc. can cause
14 measurable levels of contamination of waters samples. Other sources of
15 contamination also exist. RIDEM required the NBC to conduct scientific studies
16 to determine the results of using these new techniques for WWTF sampling.

17
18 These NBC studies determined that the use of “clean sampling” significantly
19 reduced background contamination during sampling and when used, resulted in
20 significantly more accurate results. Based on these conclusions, all sampling in
21 the NBC’s WWTF’s was transferred from the WWTF staff to EMDA staff in late
22 1999 and ‘clean sampling’ became the standard method at WWTFs in early 2000.

1 This involved the sampling of two WWTFs 365 days per year and increased
2 EMDA's number of samples collected per year by approximately 5000.

3

4 In 1999, EMDA staff began monitoring bacteria levels in the Blackstone,
5 Moshassuck, West and Woonasquatucket Rivers in support of CSO maintenance
6 and to obtain information on the impact of CSO discharges to these waterbodies
7 during periods of wet and dry weather. This work had previously been contracted
8 by NBC to an outside laboratory which collected fifteen samples every other
9 week, and provided data two weeks after sample collection and at a cost of
10 \$35,000 per year. The EMDA section collected fifteen samples weekly in 1999
11 and provided data within 48 hours. In 2000 improved analytical methods
12 provided data within 24 hours and allowed NBC Interceptor Maintenance staff to
13 address and correct any dry weather discharges almost immediately. In 2001 and
14 2002, EMDA staff collected approximately 100 samples per month (up from
15 approximately 65 / month) and assisted with visual inspections of CSOs.

16

17 In 1999 NBC received a grant from the EPA to perform analytical work for trace
18 metals, nutrients, organics and bacteria on the Woonasquatucket River. As a
19 result of these sampling requirements, EMDA collected 5,492 samples in 1999, an
20 increase of approximately 5,000 over the prior year.

21

22 In FY 2001, the EMDA section received a \$500,000 federal EPA Environmental
23 Monitoring for Public Access and Community Tracking (EMPACT) program

1 grant. This grant provided the seed funding for the STAR project, in which NBC
2 expanded monitoring programs to the Providence and Seekonk Rivers through the
3 deployment of three monitoring stations. These stations collected data at the
4 surface and bottom every fifteen minutes for temperature, salinity, dissolved
5 oxygen and chlorophyll. While approximately \$200,000 of grant funding was
6 used to purchase this equipment, another \$150,000 was used to contract with URI
7 faculty and staff to deploy and maintain this equipment. All contractor activities
8 were conducted with the assistance of EMDA staff, thus allowing NBC to
9 develop the expertise in-house to continue this valuable project. The STAR
10 project is described in detail on the next page.

11

12 The EMDA section uses state-of-the-art techniques and equipment to monitor
13 water and wastewater at the treatment facilities, industrial discharges,
14 groundwater wells, rivers, ponds and the upper Bay. On a daily basis, data is
15 exchanged between EMDA staff and other NBC staff, consultants, DEM, EPA
16 and the general public. On a monthly basis, an internal data analysis/review
17 meeting is held to provide feedback and exchange of information and to define
18 areas in which new or expanded data and studies are needed.

19

20 **Q. So the sampling by EMDA has greatly increased over recent years?**

21 A. Yes. The table at the top of the following page illustrates this increase over time.

22 It outlines samples collected, monitoring stations operating and special

1 monitoring events in the receiving waters for physical measurements such as
2 temperature, salinity, dissolved oxygen and chlorophyll.

3

4

5

NBC Sampling 1998-2002

	1998	1999	2000	2001	2002
Number of samples collected	< 500	5,492	14,786	17,042	Approx. 18,000
Number of continuous monitoring stations (physical measurements)	0	0	3	3	3
Number of special monitoring events (physical measurements)	0	0	0	5	12

6

7

8 **Q. You have mentioned the STAR project briefly several times. Could you**
9 **provide us with a more detailed explanation of the project, including the**
10 **reason the program is impacting the operating revenue requirement in the**
11 **rate year?**

12 **A.** Yes. The Sampling, Testing and Analysis of Rivers (STAR) project is a sampling
13 and analysis initiative conducted by NBC's EMDA section.

14

15 As noted earlier, EMDA is responsible for monitoring the water quality in
16 Narragansett Bay and its urban rivers in order to comply with the Rhode Island
17 Pollution Discharge Elimination Standards (RIPDES) permitting. The EMDA

1 section uses the data collected in its monitoring activities to assess the
2 effectiveness of NBC's wastewater treatment processes, to provide guidance for
3 future NBC operational and regulatory needs, and to respond to state and federal
4 mandates.

5
6 As mentioned above, in FY 2001 EMDA began monitoring the rivers with the
7 assistance of a \$500,000 grant from the EPA through its EMPACT Program.
8 Approximately \$200,000 was used for equipment for three real-time monitoring
9 stations in the Providence and Seekonk Rivers. These stations have provided
10 valuable data since 2001 and will be maintained on a long-term basis.

11
12 DEM is required by the Clean Water Act and the US EPA to develop Total
13 Maximum Daily Load (TMDL) for impaired water bodies and rivers. The
14 Seekonk and Providence Rivers have been identified by DEM as needing
15 TMDLs. A TMDL defines the pollutant in a water and the amount by which a
16 pollutant has to be reduced. DEM is in the process of developing a TMDL for
17 nutrients in the Seekonk and Providence Rivers. A schedule for TMDLs for other
18 parameters and other areas have also been defined by DEM.

19
20 In view of the potential TMDL requirements, and in accordance with the RIPDES
21 Permit, in FY 2002 EMDA began sampling the Providence and Seekonk Rivers
22 for trace metals, nutrients, and ammonia levels. This sampling also contributed to
23 the monitoring of CSO activity and the Bucklin Point Upgrade Project. Four

1 surveys were conducted, using approximately \$200,000 in State Revolving Fund
2 (SRF) funding. Additional SRF funding was allocated for the monitoring of
3 tributary rivers for fecal coliform bacteria, in support of the CSO project.
4

5 In FY 2003, the EMDA section will receive \$350,000 in SRF funding to design
6 and begin long-range monitoring of the Providence, Seekonk, and tidal portions
7 of the Woonasquatucket and Moshassuck Rivers. The program will include
8 physical parameters, analysis for nutrients, trace metals and bacteria, biological
9 surveys and a bioaccumulation study. The funds will cover the purchase of a
10 sampling boat and other field equipment. In addition, another \$112,000 will be
11 used to purchase a Nutrient Analyzer for the NBC Laboratory, which will allow
12 NBC to better define nutrient levels in the WWTF's effluent and the receiving
13 waters, and determine effluent quality necessary to minimize negative impacts on
14 receiving waters. (see Tom Brueckner's testimony noting the considerable range
15 of costs for possible solutions to address nutrients).
16

17 Contractors were hired to assist with all above noted projects. They currently
18 maintain monitoring stations and provide boats and staff to conduct sampling
19 surveys, and analyze samples. NBC staff assist with this work and are developing
20 the skill set necessary to allow NBC to continue much of the work in-house.
21

22 In Rate Year 2004, the STAR project will no longer be funded through SRF or the
23 EPA since it will be an ongoing program, integral to operations and compliance

1 with RIPDES permitting. The program will, at that time, need to be funded
2 through the operating budget at a cost of \$218,388 for personnel, \$69,854 for
3 operating supplies and \$20,000 in capital outlays. These expenses are provided in
4 detail as exhibit JM –1.

5
6 In FY 2003 data from the STAR project will be made available to the public via
7 NBC's web-site. The project serves to provide NBC with valuable data that can
8 be used to help substantiate or refute the claims by regulatory bodies that
9 additional treatment levels are required. This program is currently funded through
10 grants and SRF monies. NBC believes it is important to continue this program in
11 order to collect this valuable data.

12
13 **Q. Is the NBC requesting an increase in the number of approved personnel**
14 **positions due to this program?**

15 **A.** The NBC is requesting the approval of funding for four (4) new positions in Rate
16 Year 2004, due to the increased workload in monitoring and analysis. These
17 positions are for an Assistant EMDA Manager, an Environmental Scientist, a
18 Monitoring Technician, and a Chemist for the Laboratory.

19
20 **Q. What will be the prime responsibilities of these new staff?**

21 **A. Assistant Manager** – This position will assist with the supervision of EMDA
22 staff and projects, including the STAR project. The section will then employ
23 approximately twenty (20) staff and have a considerable number of projects and

1 activities throughout the NBC district. This number of staff, projects and activities
2 are more than can be managed by one individual. The EMDA staff work 365 days
3 per year; assist with coordination of projects and data with other RI agencies; and
4 assist in virtually all areas of operations.

5
6 Specific duties will include the scheduling and prioritizing of sampling and
7 monitoring activities, training of staff to ensure that all monitoring activities are
8 conducted using current and approved methods and that all work is conducted in a
9 safe and healthy manner. The assistant manager will provide technical advice and
10 assistance to EMDA and other NBC departments, coordinate with other state
11 agencies and research institutions to coordinate research efforts and share data,
12 prepare technical reports and assist with writing proposals. This individual will
13 also assist the manager with budget development, purchasing and in supervision
14 of staff during weekend and late hours as required by routine and special studies.

15
16 **Environmental Scientist** – This position is responsible for NBC’s wastewater
17 treatment facility and receiving water quality monitoring program with specific
18 emphasis on nutrients. Tasks include review of applicable historical data;
19 assisting with development of the STAR project, including a long term
20 monitoring plan for nutrients in WWTF effluent, the Providence and Seekonk
21 Rivers and upper Narragansett Bay; field collection of samples; analysis of
22 samples for nutrient parameters; analysis of data; and technical writing and
23 presentations. This individual will also assist in designing, implementing and

1 supporting a program where NBC will serve as a regional laboratory for analysis
2 of nutrients in wastewater for all Rhode Island WWTFs. This will include
3 meeting with WWTF staff and RI DEM to develop the program, coordinating
4 with DEM's RIPDES staff to determine data and reporting format, developing
5 contracts with WWTFs and performing the analysis and preparation of data.

6
7 This position will ensure that all work is conducted according to NBC / DEM /
8 EPA protocols and will coordinate work with other agencies involved with this
9 and similar water quality monitoring projects. The individual will remain
10 current with NBC / DEM / OSHA / EPA procedures and regulations and with
11 current scientific work in the field. He/she will assist with training of EMDA
12 staff to keep the program current in the areas noted above, and assist the EMDA
13 Manager with various projects and responsibilities as needed.

14
15 **Monitoring Technician** – This staff member will be responsible for many
16 aspects of EMDA's field program. The individual will conduct weekly field
17 sampling using EMDA's boat(s) and from the shore. He/she will maintain field
18 equipment including instrumentation at monitoring station, "ultra-clean" water
19 samplers, automatic water samplers and YSI instrumentation used to take physical
20 measurements. The person will be responsible for routine maintenance of EMDA
21 sampling boat and associated equipment such as GPS, depth sounder, electronic
22 winch and outboard motors. This equipment and boats are valued at
23 approximately \$500,000 and will serve the NBC for approximately ten years only
24 if properly maintained. The individual will also be responsible for the training of

1 staff in the use of this equipment and in all aspects of safety associated with field
2 work. He/she will also assist with data analysis and review.

3

4 **Chemist** – This staff member, assigned to the NBC Laboratory, will analyze
5 samples previously sent to contractors for metals, nutrients and fecal coliform
6 bacteria. One hundred percent of the workload handled by this position will be
7 related to the STAR project.

8

9 **Q. If the STAR program is funded annually through the operating revenue**
10 **requirement, what financial impact will this have on the ratepayers?**

11 A. Costs for the STAR program have been identified as being approximately
12 \$308,000 / year. This translates to a half of a percent (.005) of our total annual
13 revenue requirement.

14

15 **Q. Are there any cost savings associated with the STAR program?**

16 A. Yes, we believe the data collected will assist in determining permitting levels
17 mandated by state and federal agencies. A significant investment in infrastructure
18 and/or operating costs may be required by these agencies if NBC cannot provide
19 data documenting the current health of Narragansett Bay and its receiving waters.

20

21 As an example, similar monitoring work conducted by the NBC in 2001 – 2002
22 found the Providence and Seekonk Rivers to meet water quality criteria for
23 dissolved metals. This information was provided to Rhode Island Department of
24 Environmental Management (RI DEM), and it has indicated that this data will be

1 used to remove these water bodies from the “303(d) list” of impaired waters in
2 Rhode Island and to cancel the development of Total Maximum Daily Load
3 calculations (TMDLs) for metals as required by the United States Environmental
4 Protection Agency and scheduled for completion by 2010. If these TMDLs were
5 to be developed by DEM, it would result in changes to NBC’s current discharge
6 permits and the permit limits imposed on NBC’s users. NBC might have incurred
7 considerable expense in the review and comment of these TMDLs as well as
8 additional costs to implement new control measures needed to meet the TMDLs.
9

10 **Q. What type of new control measures would be needed to meet any TMDLs**
11 **established by DEM or EPA?**

12 A. These new control measures could include: regulatory changes to require
13 industrial, business and residential users to reduce their contribution of pollutants
14 into the NBC’s sewer system; the construction of new supplemental treatment
15 processes at the NBC treatment facilities and/or the modification of operational
16 processes at the NBC treatment facilities.
17

18 **Q. Would the implementation of new control measures have any cost impacts?**

19 A. Yes. The implementation of regulatory changes would certainly have cost impacts
20 on the NBC users by requiring further pretreatment for industries. Regulatory
21 changes could also be necessary that would require other presently non-regulated
22 business and residential users to implement source control measures to reduce
23 pollutant loadings. In addition, any operational changes or capital improvements

1 at the NBC facilities would also have cost impacts. (See Tom Brueckner's
2 Testimony regarding possible costs for nutrient control).

3

4

5 **Q. Are these future cost impacts quantifiable?**

6 A. No. The cost impacts are related to specific pollutant loading levels identified in
7 established TMDLs by DEM and/or EPA. The only possible future cost impacts
8 that have been identified are those for nutrients (See Tom Brueckner's
9 Testimony).

10

11 **Q. Has the NBC considered any other alternatives to the STAR project?**

12 A. No, all aspects of the STAR project are required by NBC's RIPDES permits and
13 must be completed.

14

15 **Q. Does this conclude your pre-filed testimony?**

16 A. Yes.

Narragansett Bay Commission
Expense Analysis - Sampling, Testing, Analysis of Rivers (STAR) Project
Rate Year 2004

Exhibit JM-1

Type of Expense		Account	Expense
Personnel Costs:			
Positions to be filled:	Assistant EMDA Manager	\$ 46,009	
	Environmental Scientist	34,200	
	Monitoring Tech	30,747	
	Chemist	34,978	
Sub-Total Salaries and Wages			\$ 145,934
FICA		52810	11,164
Health Insurance			46,204
Long-term Disability		52990	632
Retirement Benefits			14,454
Total Personnel Costs			218,388
O & M:			
Additional testing materials in Lab for nutrients, metals, fecal coliform (acid, bottles, etc.)		54340	27,354
Additional sampling supplies EMDA (bottles, etc.)		54340	5,000
Nextel phones (\$500 per field employee)			1,500
Insurance on boat			6,500
Fuel for boat			4,000
Special Services - Contract Lab analysis (trace metals split samples)		52690	25,500
Total O & M			69,854
Capital Outlays:			
Replacement buoy components (2 @ \$10,000 each)			20,000
Total Capital Outlays			20,000
Total Star Project Requirements			\$ 308,242

Narragansett Bay Commission

Schedule of Lease Payments

Vendor	Equipment	Test Year FY 2002		Rate Year FY 2004	
		Principal	Interest	Principal	Interest
Acom	Folding Machine	\$ 1,200	\$ 319	\$ -	\$ -
Compaq	Computers	27,979	2,914	-	-
Compaq	Computers	22,171	1,928	-	-
Compaq - Amendment	Computers	6,573	543	-	-
Dana Commercial Lease #5	Computers	289	2	-	-
GE Capital	Computers	11,582	452	15,443	602
GE Capital (Compaq)	Computers	8,108	889	-	-
GE Capital (Compaq)	Computers	5,208	1,247	1,301	312
HP	Computers	-	-	9,185	1,785
HP	Computers	-	-	14,252	1,916
HP	Computers	-	-	17,888	2,395
IOS Capital	Copier	3,195	848	3,195	848
IOS Capital	Copier	5,127	394	5,127	394
IOS Capital	Copier	3,195	1,001	3,195	1,001
IOS Capital	Copier	2,772	928	2,772	928
IOS Capital	Copier	2,033	508	339	85
IOS Capital	Copier	1,724	337	4,137	810
IOS Capital	Copier	808	213	3,782	999
IOS Capital	Copier	388	10	4,849	1,280
IOS Capital	Copier	-	-	12,711	810
Grand Total		<u>\$ 102,351</u>	<u>\$ 12,534</u>	<u>\$ 98,173</u>	<u>\$ 14,165</u>

***Narragansett Bay Commission
FY 2002 Debt Service Schedule***

<i>BOND/SRF DESCRIPTION</i>	<i>DUE DATES</i>	<i>FYE 2002</i>	
		<i>INTEREST</i>	<i>PRINCIPAL</i>
GOB - REFUNDED \$270,000 (\$5M)	1-Nov	1,057.50	
	1-May	1,057.50	15,000.00
GOB - REFUNDED \$967,781 (\$14M)	15-Dec	16,198.93	
	15-Jun	4,917.48	163,916.00
GOB - REFUNDED \$134,500 (\$14m)	1-Aug	3,364.13	
	1-Feb	3,364.13	
6M GOB - REFUNDED \$2,805,687.89	15-Dec	54,209.04	
	15-Jun	7,772.76	259,092.00
6M GOB - REFUNDED \$802,300	1-Aug	20,104.62	
	1-Feb	20,261.38	
21.55M GOB - REFUNDED \$560,000	1-Aug	4,666.50	339,400.00
	1-Feb	5,508.50	
21.55M GOB - REFUNDED \$2,040,904	1-Aug	55,542.00	10,085.00
	1-Feb	55,289.73	
5.5M GOB - REFUNDED \$3,500,000 SERIES D	15-Dec	45,850.00	
	15-Jun	45,850.00	175,000.00
\$7.731M BVDC GOB	15-Dec	149,362.35	
	15-Jun	21,419.00	713,975.00
\$7.731m BVDC GOB - REFUNDED (\$2,211,700)	1-Aug	55,639.00	
	1-Feb	55,639.00	
\$3,080,000 BVDC GOB (\$4.85M) - 1993 Refund	15-Dec	37,285.00	
	15-Jun	37,285.00	435,000.00
\$900,000 Part A- BVDC GOB REFUNDED (\$103,800)	1-Aug	1,821.00	62,900.00
	1-Feb	1,021.25	
\$900,000 Part B - BVDC GOB 1996 Refund \$377,753	1-Aug	10,281.00	1,864.00
	1-Feb	10,235.05	
\$100,000 BVDC GOB	1-Aug	507.50	5,000.00
	1-Feb	382.50	
Fleet \$100 BVDC Partial Refunding BVDC 1971 Serices D 9/98 Rer	15-Jul	759.38	
	15-Jan	759.38	

***Narragansett Bay Commission
FY 2002 Debt Service Schedule***

<i>BOND/SRF DESCRIPTION</i>	<i>DUE DATES</i>	<i>FYE 2002</i>	
		<i>INTEREST</i>	<i>PRINCIPAL</i>
\$100,000 BVDC GOB 4/01 Ref.	1-Aug	262.50	
	1-Feb	262.50	
\$3,315,000 BVDC GOB	1-Aug	18,485.00	140,000.00
	1-Feb	14,985.00	
\$3,315,000 BVDC GOB 9/98 Ref (\$1.3M)	15-Jul	24,658.13	5,000.00
	15-Jan	24,658.13	
\$3,315,000 BVDC GOB 9/98 Ref (\$305K)	15-Jul	6,143.75	
	15-Jan	6,143.75	
Fleet \$3,315,000 Partial Refunding BVDC 1986 Series F (Ref 4/01)	1-Aug	11,000.00	
	1-Feb	11,000.00	
SRF - NO. PROV. \$2.647M	1-Sep	25,498.84	127,153.36
	1-Mar	29,118.96	
SRF - WP/RA - \$3.694	1-Sep	33,206.64	166,017.00
	1-Mar	31,150.32	
SRF - BUTLER - \$1.662M	1-Sep	17,687.41	76,864.91
	1-Mar	20,000.34	
SRF POOL LOAN I - \$14.781M	1-Sep	220,546.44	614,500.00
	1-Mar	209,272.86	
SRF POOL LOAN II - \$17.279M	1-Sep	223,636.32	721,955.00
	1-Mar	230,946.24	
SRF POOL LOAN III - \$8.150M	1-Sep	143,169.22	293,778.00
	1-Mar	137,997.45	
SRF POOL LOAN IV - \$23.955M	1-Sep	0.00	
	1-Mar	260,120.68	
<i>Total</i>		<i>\$2,427,361.09</i>	<i>\$4,326,500.27</i>
<i>Total Interest and Principal Debt Service</i>		<i>\$6,753,861.36</i>	

Narragansett Bay Commission

Long Term Debt

Commission's portion of the State's 1988 Refunding Authority Revenue Bonds – Series A original issue \$270,000 maturing through May 2003 with interest of 4.5% - 7.1%.

Commission's portion of the State's 1997 Refunding Bonds original issue \$134,500 maturing through August 2005 with interest of 5% -6%.

Commission's portion of the State's 1997 Refunding Bonds original issue \$802,300 maturing through August 2007 with interest of 5% -6%.

Commission's portion of the State's 1997 Refunding Bonds original issue \$560,000 maturing through August 2010 with interest of 5% -6%.

Commission's portion of the State's 1996 Refunding Bonds original issue \$2,040,904 maturing through August 2009 with interest of 4.25% -6%.

Commission's portion of the State's 1987 General Obligation Bonds original issue \$3,500,000 maturing through December 2008 with interest of 6.9% -7.6%.

Commission's portion of the State's 1997 Refunding Bonds original issue \$2,211,700 maturing through August 2007 with interest of 5% -8%.

Commission's portion of the State's 1993 Refunding Bonds original issue \$3,080,000 maturing through June 2005 with interest of 5% -8%.

Commission's portion of the State's 1997 Refunding Bonds original issue \$103,800 maturing through August 2010 with interest of 5% -6%.

Commission's portion of the State's 1996 Refunding Bonds original issue \$377,753 maturing through August 2009 with interest of 4.25% -6.0%.

Commission's portion of the State's 2001 Refunding Bonds original issue \$20,000 maturing through August 2012 with interest of 5% -8%.

Commission's portion of the State's 1998 Refunding Bonds original issue \$30,000 maturing through August 2011 with interest of 3.35% -5.23%.

Commission's portion of the State's 2001 Refunding Bonds original issue \$10,000 maturing through August 2012 with interest of 3.35% -5.50%.

Commission's portion of the State's 1993 Capital Appreciation Bonds original issue \$37,927 maturing through August 2008 with interest of 5% -8%.

Commission's portion of the State's 2002 Refunding Bonds original issue \$6,215,000 maturing through December 2007 with interest of 2.45% -3.85%.

Commission's portion of the State's 1992 Refunding Bonds original issue \$730,000 maturing through August 2012 with interest of 5% -8%.

Commission's portion of the State's 1998 Refunding Bonds original issue \$985,000 maturing through August 2011 with interest of 3.35% -5.25%.

Commission's portion of the State's 1998 Refunding Bonds original issue \$305,000 maturing through August 2009 with interest of 4% -4.125%.

Commission's portion of the State's 2001 Refunding Bonds original issue \$415,000 maturing through August 2012 with interest of 3.35% -5.50%.

Commission loan outstanding with the RI Clean Water Finance Agency – Butler Hospital Project – The total loan is \$1,662,054 with an interest rate of 3.7644%.

Commission loan outstanding with the RI Clean Water Finance Agency – North Providence – The total loan is \$2,647,977 with an interest rate of 3.725%.

Commission loan outstanding with the RI Clean Water Finance Agency – Washington Park Project – The total loan is \$3,694,678 with an interest rate of 3.5171%.

Commission loan outstanding with the RI Clean Water Finance Agency – Pooled Loan #1 – The total loan is \$14,781,000 with an interest rate of 3.66917%.

Commission loan outstanding with the RI Clean Water Finance Agency – Pooled Loan #2 – The total loan is \$17,279,000 with an interest rate of 3.4938%.

Commission loan outstanding with the RI Clean Water Finance Agency – Pooled Loan #3 – The total loan is \$8,150,000 with an interest rate of 3.64473%.

Commission loan outstanding with the RI Clean Water Finance Agency – Pooled Loan #4 – The total loan is \$23,955,000 with an interest rate of 3.032%.

Commission loan outstanding with the RI Clean Water Finance Agency – Pooled Loan #5 – The total loan is \$57,000,000 with an interest rate of 3.30%.

Commission loan outstanding with the RI Clean Water Finance Agency – Pooled Loan #6 – The total loan is \$57,000,000 with an interest rate of 2.133%.

Narragansett Bay Commission - Expense Analysis - Personnel and Overtime Information

Personnel Information

Test Year	Number of employees 07/01/01	Number of Employees 06/30/02
FY 2002	229	242

Overtime

Fiscal Year	Dollar Amount	
FY 2002	\$	464,876
FY 2001	\$	440,966
FY 2000	\$	374,430

Number of Employees in Rate Year: 254 *

Overtime Included in Rate Year: \$ 479,520

*** Includes 4 positions for the Star Project**

Compliance Reporting per Docket # 3162

Capital Improvement Project Status Report	Report submitted September 5, 2002. The NBC is currently awaiting the PUC's suggested format in order to resubmit this report.
Restricted Account Report	Report submitted October 31, 2002
Docket 3432 - Stormwater Rate Study	The NBC submitted pre-filed testimony on November 1, 2002. This testimony was in response to questions posed at a pre-hearing conference held on September 6, 2002. Hearings on this subject are scheduled for January 14, 2003.
Independent Oversight of CSO Project (Special Master)	The NBC has restricted the appropriate funds.

Narragansett Bay Commission Docket #3162
Compliance Reporting on Restricted Accounts for FY 2003

	Cash Receipts	Capital/Debt 1.88700%	Debt 41.04000%	Debt Coverage 7.18400%	Total Capital/Debt/ Debt Coverage	Special Master 0.35400%
Percentage						
Receipts:						
Beginning Balance						
July-02	1,041,085.74	(0.00)	2,439,834.12	1,705,907.64	4,145,741.76	227,402.35
August-02	4,556,285.23	19,645.29	427,261.59	74,791.60	521,698.48	3,685.44
September-02	2,979,213.83	85,977.10	1,869,899.46	327,323.53	2,283,200.09	16,129.25
October-02	-	56,217.76	1,222,669.36	214,026.72	1,492,913.84	10,546.42
November-02	-	-	-	-	-	-
December-02	-	-	-	-	-	-
January-03	-	-	-	-	-	-
February-03	-	-	-	-	-	-
March-03	-	-	-	-	-	-
April-03	-	-	-	-	-	-
May-03	-	-	-	-	-	-
June-03	-	-	-	-	-	-
	161,840.15	5,959,664.53	2,322,049.49	8,443,554.17	257,763.46	
Expenses:						
July-02	111,533.90	807.48	-	-	112,341.38	-
August-02	11,177.00	2,057.48	-	-	13,234.48	-
September-02	-	3,660,542.33	-	-	3,660,542.33	-
October-02	-	-	-	-	-	-
November-02	-	-	-	-	-	-
December-02	-	-	-	-	-	-
January-03	-	-	-	-	-	-
February-03	-	-	-	-	-	-
March-03	-	-	-	-	-	-
April-03	-	-	-	-	-	-
May-03	-	-	-	-	-	-
June-03	-	-	-	-	-	-
	122,710.90	3,663,407.29	-	3,786,118.19	-	-
Balance	39,129.25	2,296,257.24	2,322,049.49	4,657,435.98	257,763.46	

NARRAGANSETT BAY COMMISSION

STATEMENT OF NET ASSETS

Year Ended June 30, 2002

CURRENT ASSETS

Cash and cash equivalents	-\$ 10,263,854
Accounts receivable	
Sewer use (net of allowance)	4,892,781
Sewer use unbilled	6,793,863
Receivables, other	13,612
Due from State of Rhode Island	17,302
Deposits	10,000
Prepaid expenses	125,255
Total current assets	<u>22,116,667</u>

NONCURRENT ASSETS

Restricted assets	
Cash, environmental enforcement	45,288
Cash and cash equivalents, restricted	3,886,563
Cash and cash equivalents, restricted for the acquisition and construction of capital assets	7,581,428
Total restricted assets	<u>11,513,279</u>

Capital assets

Land	4,115,559
Plant and equipment	66,353,384
Capital projects completed	188,148,788
Construction in progress	76,255,003
	<u>334,872,734</u>
Less accumulated depreciation	<u>(70,960,049)</u>
Net capital assets	<u>263,912,685</u>

Other assets

Organization costs (net of accumulated amortization)	116,712
Bond and loan issuance costs (net of accumulated amortization)	2,291,389
Total other assets	<u>2,408,101</u>
Total noncurrent assets	<u>277,834,065</u>
TOTAL ASSETS	<u>299,950,732</u>

NARRAGANSETT BAY COMMISSION

STATEMENT OF NET ASSETS

Year Ended June 30, 2002

CURRENT LIABILITIES

Accounts and contracts payable	-\$ 10,015,940
Accrued interest payable	1,041,093
Other accrued expenses	2,377,230
Deferred revenue	866,749
Current portion of loans payable	3,378,379
Current portion of leases payable	118,090
Current portion of long-term debt	2,196,724
Total current liabilities	<u>19,994,205</u>

NONCURRENT LIABILITIES

Accreted interest payable	272,285
Long-term loans payable, net	71,432,481
Long-term leases payable, net	179,091
Long-term debt, net	13,775,319
Total noncurrent liabilities	<u>85,659,176</u>

TOTAL LIABILITIES

105,653,381

NET ASSETS

Invested in capital assets, net of related debt	172,560,316
Restricted, environmental enforcement	45,288
Unrestricted	21,691,747
TOTAL NET ASSETS	<u>\$ 194,297,351</u>

NARRAGANSETT BAY COMMISSION

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS

Year Ended June 30, 2002

OPERATING REVENUES

User fees, residential	\$ 18,096,097
User fees, commercial and industrial	15,153,441
Permit and connection fees	51,450
Pretreatment	861,821
Environmental enforcement	5,060
Septage income	597,696
Abatement fees	4,428
Miscellaneous revenue	80,226
BOD/TSS surcharge	116,088
Total operating revenues	<u>34,966,307</u>

OPERATING EXPENSES

Personnel services	13,373,277
Contractual services	4,083,886
Travel	51,598
Repairs and maintenance	1,237,214
Utilities	2,388,772
Supplies	1,370,809
Depreciation	5,699,783
Amortization	149,406
Insurance	422,341
Incinerator	228,395
Rental of outside property	180,687
Bad debt expense	206,109
Miscellaneous	409,411
Total operating expenses	<u>29,801,688</u>
Operating income	<u>5,164,619</u>

NONOPERATING REVENUES (EXPENSES)

Grant	1,132,839
Interest expense	(2,877,973)
Interest income	244,713
Late charge penalty	470,674
Arbitrage rebate	260,632
Loss on disposal of assets	(117,486)
Bond and note issue costs	(2,500)
	<u>(889,101)</u>
Net income before capital contributions - forward	<u>4,275,518</u>

NARRAGANSETT BAY COMMISSION

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS
Year Ended June 30, 2002

Net income (loss) before capital contributions - forwarded	\$ 4,275,518
Capital contributions	<u>9,064,450</u>
Change in net assets	13,339,968
TOTAL NET ASSETS, BEGINNING	180,957,383
TOTAL NET ASSETS, ENDING	<u><u>\$ 194,297,351</u></u>